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Pensions & Investment Age

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The GEIC fund has completed purchase of the Hyatt Regency in Hilton Head, S.C.

General Electric cuts realty allocation 20%

By Alan Krauss

STAMFORD, Conn. — The $13.3 billion General Electric Co. pension fund has reduced its real estate holdings 20% to 25% in response to a sluggish, uncertain market.

The pension trust has reduced its real estate exposure by $300 million to $400 million during the past 18 months in the course of restructuring the portfolio and "due to market conditions," said Joel R. Wilson. Mr. Wilson is senior vice president of General Electric Investment Corp., the giant manufacturing company's pension investment subsidiary, and manager of its real estate investment activities.

Real estate

The trust now has about $1.6 billion, or 12% of assets, in property investments.

"We have not diminished our feeling that real estate is a viable and key part of our enhancement activities," Mr. Wilson said, referring to GEIC's distinction between "core" pension investments — common equity and fixed-income portfolios — and "enhancement arenas" such as real estate, corporate private placements and venture capital.

The trust is restructuring its portfolio by eliminating non-equity real estate investments, Mr. Wilson said, citing the recent sale of $600 million in non-participating mortgages to Salomon Brothers Inc.

"At the same time we have reduced the absolute number of dollars going into real estate, (and) deteriorating market conditions (have driven) the sales of other properties," he noted.

Noting property prices have been flat for most of the past 18 months, Mr. Wilson attributed the muddled condition of the market to several other factors. While the slowdown in syndication activity has been offset by continued buying by the large insurance companies, office markets are overbuilt, there is continued concern about tax reform and "the general perception of the real estate markets" is marked by confusion, he said.

"It's a very complicated picture right now," he said. "There is much uncertainty ... about how these factors will interact."

GEIC is highly regarded throughout the industry

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Wheeling-Pitt rivals push for change on PBGC liability rule

By Trudy Ring

PITTSBURGH — At least two competitors are lobbying, and others are complaining, that Wheeling-Pittsburgh Steel Corp. should be liable for some of the huge unfunded pension liability it is dumping on the Pension Benefit Guaranty Corp.

Wheeling-Pitt, one of several financially strapped steel companies with underfunded pension plans, would have a competitive advantage if it is able to rid itself of its estimated $440 million unfunded liability, officials of other steel firms say.

National Intergroup Inc., Pittsburgh, is lobbying for modifications in proposed PBGC legislation in an attempt to make it applicable to the Wheeling-Pitt situation, a spokesman confirmed.

Representatives of Cyclops Corp., also of Pittsburgh, have met with the PBGC and members of Congress concerning the legislation, a spokesman said. Also, Cyclops' president has denounced Wheeling-Pitt's termination attempt in the daily press.

Officials of some other steel companies said they believe allowing Wheeling-Pitt to get rid of unfunded liabilities while continuing in business is unfair to the rest of the industry, but added they aren't aware of specific lobbying efforts. The chief executive officer of U.S. Steel Corp. has labeled the termination effort "industrial welfare."

Wheeling-Pittsburgh officials had no comment.

If the pending PBGC legislative package is adopted and made retroac-

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L.A. County hires 5 for real estate

By Steve Hemmerick

LOS ANGELES — Los Angeles County Employees' Retirement Association trustees have decided to make the fund's first significant move into real estate, hiring five real estate managers and committing at least $100 million to them.

The county fund hired: John McMahan Associates Inc., San Francisco; The Prudential Asset Management Co., Newark, N.J.; Heitman Advisory Corp., Chicago; Goldman, Sachs & Co., New York; and Security Capital Real Estate, New York.

In hiring the five managers with complementary styles, the trustees sought not only to diversify into real estate, but to diversify within real estate itself, said Charles Spencer, fund manager.

By the end of the year, the retirement association could commit another $50 million, bringing the total investment to $150 million. Mr. Spencer said trustees could choose a sixth manager from

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Pipelines facing asset flood

By Fred Williams

DALLAS — Officials of six natural gas pipeline companies, all subjects of mergers and acquisitions, are grappling with how to allocate more than $1.5 billion in pension assets.

They also may have to wrestle with the disposition of surplus assets in overfunded pension plans if the plans are terminated.

Should a termination occur, the role of the regulatory agency might become a factor in deciding who gets the surplus — the corporation or the customer.

Natural gas pipeline companies have been involved in mergers totaling $5.6 billion so far this year. Among them:

- Coastal Corp., Houston, acquired American Natural Resources Co., Detroit, for about $2.3 billion.
- InterNorth Inc., Omaha, Neb., merged with Houston Natural Gas Corp., in a deal valued at about $2.1 billion.
- MidCon Corp., Chicago, is in the final stages of acquiring United Energy Resources Inc., Houston, in a deal estimated at about $1.2 billion.

The acquiring and acquired companies had overfunded pension plans with total assets of about $1.53 billion at the end of 1984 and excess assets of $478.8 million.

Pension executives say plan design and eventual disposition of assets remains to be determined, but Curt Launer, pipeline industry analyst for L.F. Rothschild, Unterberg, Towbin, New York, believes the overfunding is integral to the pipeline mergers and acquisitions.

"The overfunded status of the pension plans was not the thing that got it started, but was a big factor in keeping it going. Overfunded pension plans, unused investment tax credits and tax loss carryforwards all were very important considerations," he said.

While none of the pipeline companies in the first round of mergers has filed to terminate any of the plans, if the industry follows the pattern established by oil companies, banks and thrift institutions, there could be a series of termination notices by pipeline

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Defined contribution highlighted

Oil field service and products division workers for Halliburton Co. The Dallas company's defined contribution plan is one of several profiled in the special section beginning on page 37.

Refinancing cuts liabilities

Harvester considers leasing

By Barry B. Burr

CHICAGO — International Harvester Co. is exploring leasing as one way to use $1.4 billion of tax loss carryforwards after it received renewed vigor by putting together a widely praised refinancing package that includes cutting by more than half its $900 million in unfunded pension liabilities.

John R. MacLean, assistant treasurer, said the carryforwards represent an opportunity to shelter income from taxes.

As of Oct. 31, 1984, the close of its last fiscal year for which data are available, Harvester had $972 million of domestic and $442 million of foreign carryforwards available to reduce future taxable income. Of the total, $319 million is available through 1992, the rest thereafter.

"We are are not looking to make acquisitions," Mr. MacLean said. "We aren't going to use cash to buy other companies to use" the carryforwards."

Before putting together its refinancing, Mr. MacLean said Harvester momentarily considered turning over its unfunded pension liabilities to the Pension Benefit Guaranty Corp.

"We considered it for a nanosecond," he said.

But such an action undoubtedly would have triggered a bankruptcy, with the PBGC asserting claims on the company's assets to try to cover the liabilities, he added.

One area the company the company is looking at is leasing. He said Harvester is considering buying leases that have lost their tax write-off value for their existing holders. Firms in that position "would just as soon not have the leases," Mr. MacLean said.

"It's a very complicated deal," he added. "I assure you it's a very exploratory area."

Harvester, whose business now is more than 90% truck manufacturing, sold its name along with its agricultural division to a unit of Tenneco Inc. last January and will adopt a new name next year.

James C. Cotting, vice chairmand and chief financial officer, said the voluntary refinancing is designed to reduce the company's unfunded pension liabilities by about $500 million and to improve its capitalization by changing $200 million in private floating-rate debt of its parent and credit unit for public long-term debt. In addition, the improved credit picture will enable its International Harvester Credit Corp. unit to issue commercial paper for the first time in three years.

Mr. Cotting said the refinancing would have no immediate effect on Harvester's negative net worth. Also, the company still will have about $800 million in long-term debt.

With Harvester's improved picture, Charles V. Bromley, analyst with Duff & Phelps Inc., Chicago, called the negative net worth "an academic thing. Its cash flow is good, so it doesn't matter."

However, he added, Duff & Phelps wasn't immediately going to change Harvester's credit rating of 16, its second worst rating.

An official at Prudential Insurance Co. of America, Newark, N.J., praised the move. Prudential is a long-time lender to Harvester and potentially its biggest shareholder with interests that could give it ownership of 10% of the company.

Harvester is taking $350 million in equity out of its credit subsidiary to use for the pension plan. Harvester will use the cash to set up a dedicated bond portfolio yielding an estimated 12%.

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More than 90% of Harvester's business now is truck manufacturing.

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* October indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	4.6	11.6	19.4
Russell 3000[1]	4.6	18.2	19.8
Ryan Index[2]	2.1	16.8	20.6
SLAE Gov't./Corp.[2]	2.0	15.0	18.7

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income

PBGC adopts get-tough approach

By Joel Chernoff

News analysis

WASHINGTON — The agreement to collateralize The LTV Corp.'s $183 million funding waiver shows the Pension Benefit Guaranty Corp. is evolving into a hard-nosed, high-profile agency from one that once was obscure outside pension circles.

Although the agency was created in 1974, it didn't begin to garner national attention until the early 1980s, with such big cases as International Harvester Co., Rath Packing Corp., Facet Enterprises Inc., Armco Inc., Wheeling-Pittsburgh Steel Corp. and others.

Its get-tough stance was most apparent in getting LTV of Dallas to agree to the collateralized waiver.

In the process, LTV officials privately condemned part of the PBGC's method of operation, accusing the federal agency of leaking key information to the press.

In particular, stories in nationwide publications saying the PBGC was seriously considering seeking involuntary termination of LTV's

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3 plans tap venture cap

By Trudy Ring

Three venture capital funds recently have drawn investments from pension funds.

The pension funds of Independent Insurance Group, Jacksonville, Fla., and L.M. Berry & Co., Dayton, Ohio, made commitments to the Santa Fe Private Equity Fund II, Santa Fe, N.M., which will invest primarily in health care companies.

The Michigan State Employees' Retirement Systems invested in two venture funds, Accel Telecom of Princeton, N.J., which will invest in telecommunications and data communications companies, and New Tech Ventures, San Francisco, which will specialize in industrial technology.

Independent Insurance Group's $80 million pension fund put $750,000 into the Santa Fe fund, said Tom Weaver, president of Independent Investment Advisory Services Inc., the subsidiary handling the pension assets.

L.M. Berry, with $40 million in pension assets, invested $500,000 in the Santa Fe fund, said Donald T. Zimmer, treasurer.

The International Business Machines Corp. pension fund, Stamford, Conn., also reportedly is an investor in the fund, but an IBM official said it is company policy not to discuss investment matters with the press.

Both Mr. Weaver and Mr. Zimmer said one reason for their investments was the expertise of A. David Silver, managing general partner of the fund. Mr. Silver, a venture capitalist since 1967, had raised another Santa Fe fund in 1983. It also invested in health care companies, as well as computer-related companies.

For the new Santa Fe fund, Mr. Silver has raised about $15 million to date. He said he expects to raise $35 million, with the fund closing Jan. 31.

About 30% of the capital raised to date has come from pension funds, Mr. Silver said. Much of the remainder has come from the general accounts of insurance companies, he said.

Mr. Silver said he expects to

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Guidelines survive INTERCO lawsuit

By Joel Chernoff

The Reagan administration guidelines on asset reversions from pension plan terminations survived their first legal challenge when a federal judge last week threw out a suit brought by INTERCO Inc. of St. Louis.

"We're very pleased," said Kathleen Utgoff, executive director of the Pension Benefit Guaranty Corp. "We're more than pleased."

In his ruling, U.S. District Court Judge John Nangle of St. Louis held the PBGC is owed great deference in determining whether a termination has taken place.

The judge ducked the controversial issue of whether the administration's guidelines are valid under law.

"This court agrees with the PBGC that the guidelines are irrelevant to the issue in this case. It is clear to this court that Title IV of (the Employee Retirement Income Security Act) grants the PBGC the authority to deny recognition of INTERCO's termination action even if the guidelines had never been issued," the judge wrote.

An attorney for INTERCO said the company is reviewing the decision and does not know whether it will be appealed.

Roger Thomas, pension counsel for the House Select Committee on Aging, said that because the court did not appear to rule on the merits of the termination guidelines, their legality still is in doubt.

A separate lawsuit challenging the spinoff/termination of United Air Lines Inc.'s pilots' plan is in litigation, in a case that might affect the guidelines' legality (*Pensions & Investment Age*, Aug. 19).

A lot was riding on the INTERCO case. Employers have taken advantage of methods allowed under the guidelines to recapture billions of dollars in surplus assets while still providing defined benefit plans for their current employees.

The guidelines, adopted in May 1984 after months of debate by the PBGC and the Departments of Labor and Treasury, allow companies to recapture surplus assets through either a spinoff/termination or a termination/re-establishment.

In the former, the original plan is split into two parts with the excess assets placed in one of the plans, which is later terminated, enabling a recapture. In the latter, the entire plan is terminated, and a similar plan replaces it.

Key to the guidelines was a requirement that employers fully vest all employees in the original

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New listings' price surge studied

By Barry B. Burr

Index fund managers increasingly are paying dearly — and sometimes unnecessarily — to acquire stocks newly listed on the Standard & Poor's 500 index, a study by two University of Southern California academics shows.

The study shows a sudden surge of trading volume and an abrupt increase in the stock price the first day after a new S&P 500 listing is announced. The extraordinary demand and price continue for several days and then generally fall back, although their average volume remains higher than the level prior to the announcement.

In their study, Lawrence E. Harris and Eitan Gurel, both assistant professors of finance and business economics, attribute the sharp rise in price to the surge of buying by institutional investors to add the newly listed stocks to their index fund portfolios.

Impact of listing stock in S&P 500 index[1]

Period	Trading volume[2]	Price changes[3]
Monday	89%	0.01%
Tuesday	91	−0.13
Wednesday[4]	95	0.01
Thursday	281	3.13
Friday	162	0.09
Monday	151	−0.21
Tuesday	123	0.02

[1] There were 84 additions to S&P 500 between 1978 and 1983
[2] Relative to previous averages adjusted for market activity
[3] Relative to price change of market as whole
[4] Stocks are added to S&P 500 on Wednesdays after the market closes

Source: Lawrence E. Harris and Eitan Gurel

Moreover, they say the steep rise in volume and price for the newly listed stocks is increasing as index funds grow in size and exert more influence on stock prices of the S&P 500 index.

Index fund assets run by managers increased to $46.6 billion in 1984 from $9 billion in 1980, according to a survey (*Pensions & Investment Age*, April 1). Other estimates put the amount now at $60 billion and, when pension plan in-house index portfolios are included, at $100 billion.

Managers at several major index funds, while generally agreeing with the USC study, contend the findings don't necessarily apply to them because of various strategies they use to ease the price impact.

Indeed, Mr. Harris said, "Certainly the smarter ones (managers) are holding back somewhat until the price falls back" before buying.

Managers said the strategies some of them use to buy newly listed S&P 500 stocks become a way of differentiating the seemingly uniform index funds.

Patricia C. Dunn, vice president at Wells Fargo Investment Advisors, San Francisco, said the price impact of acquiring newly listed S&P stocks "is an issue every indexer has to deal with effectively and every index client has to be concerned with."

"It's a competitive issue among indexers. It's one of the few aspects of an index on whether you can do a better job than another indexer," she said.

At Northern Trust Co., Chicago, Mike N. Alex, second vice president, said, "There is no need to run out and buy that stock immediately.

"It becomes a timing play. I tend to stay away from a stock for one or two months, until it comes back down to a better price."

Such a strategy, he added, "could be a potential problem, if it is a big stock. But in that case, we would buy the stock that (first) day and pay whatever penalty there is."

Ms. Dunn said, "If you're an indexer, you have to work your trading with this in mind. Otherwise you will give up some return."

In one approach to dealing with S&P 500 additions, Ms. Dunn said, Wells Fargo sets up limited orders.

"We take our time to acquire the stock," she said, purchasing the stock so long as the price impact is no more than one-half basis point after market movement adjustment.

Also, for clients with other portfolios with Wells Fargo, she might sell S&P stocks to their index accounts "with no market impact."

At Great American Core Investors Inc., Tarrytown, N.Y., Robert A. Windsor, vice president, said the price managers pay for the stocks "really would depend on what type of index fund you are running."

"If you are buying all 500 stocks, then you have to buy that stock," he said.

Unlike Wells Fargo, Great American runs a sample index of 275 to 300 stocks, selected to track the S&P 500.

Few managers use samples, said Ravi Aiyer, director of research at Paribas Asset Management, New York. Most indexers buy all or close to all 500 stocks, generally eliminating bankruptcy candidates.

Northern Trust holds 444 stocks, screening stocks for financial viability, Mr. Alex said.

Great American buys all the big S&P 500 stocks and a sampling of the smaller ones. "You would have to buy a very large stock, because its movement would have a big impact on the index," Mr. Windsor said.

The managers, among others, noted pension executives often don't raise the issue of purchasing strategies for newly listed stocks when selecting index funds.

In attributing the price rise to purchases by index fund managers, Messrs. Harris and Gurel say, "It is unlikely that changes in the

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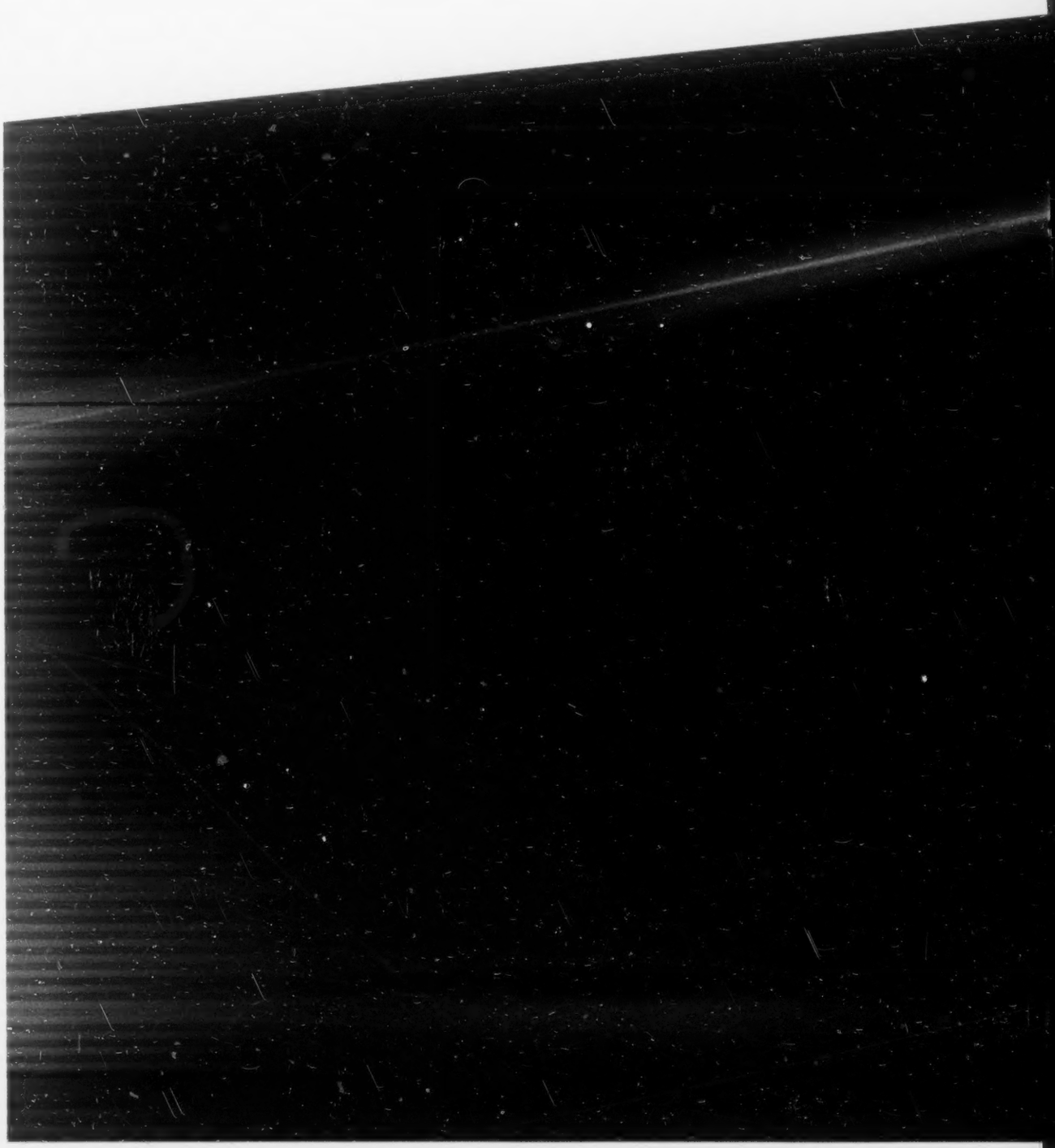
Now business



New listings . . .

Continued from page 14

composition of the S&P 500 list convey new information" about the companies that would cause an upward valuation of the stock prices.

"When a stock is added to the list, they (index managers) may buy it where previously they would not," the two academics wrote.

Mr. Harris said, "All it (the rise) can be is price pressure in buying the stocks." He and his colleague call their findings the price-pressure hypothesis.

Standard & Poor's Corp. customarily announces replacement listings on Wednesdays after the close of the stock market.

Messrs. Harris and Gurel studied the 211 additions to the index between 1973 and 1983 and found the volume and price surges were increasingly more pronounced in recent years.

"Volume and price effects grew in strength through the sample period because index funds grew," they wrote.

In looking at the 50 new listings between 1981 and 1983, Messrs. Harris and Gurel found in the trading Thursdays that volume, adjusted for market volume, rose slightly more than an average of 340% from each stock's volume eight weeks before the announced inclusion and price rose 3.25% over the average price rise in the market as a whole.

While volume and price increases begin to decline after the first Thursday of trading, slowly moving back to preannouncement level, volume continues to stay above its prelisting level. Their study suggests, "Inclusion on the S&P 500 list permanently increases a security's trading volume."

For active managers, the new listing can bring a quick and tidy profit, as they sell shares to passive managers, said Mr. Harris and others.

Mr. Harris suggested the volume and price increases could be even more pronounce than the study shows.

"I think if all the index funds bought (the stock) on the first day (of trading after the announcement) the results would be more dramatic," he said. "I think some do defer the purchase of the stock."

When Mr. Windsor wants to include a newly listed stock in Great American's sample index, he said, "I typically will not run out and buy a stock the next day" after it is listed. "I wait for the price to come back in line."

The impact of a stock on tracking the S&P 500 generally "isn't critical enough to run out and buy the stock the next day and run up the stock price," he added.

"A big company might be 1% of the S&P. If the stock makes a 10% move (in price), then you have a 10-basis point move in the index — a large move in the index."

But during a year, such tracking errors might add up, with an average of 20 annual changes in the S&P 500.

The issue of sampling or indexing turns in part on the price impact of acquiring newly listed S&P stocks.

One criticism of having a full or nearly full 500-stock index against a sampling "is that you are buying high," said Ms. Dunn.

"But to counter that you have to look at the returns of full cap weighted funds vs. sample funds. Full cap weighted funds have been closer to the S&P than sample funds," consultants say.

But sample funds have advantages, too. "Custodian, monitoring and trading costs should be lower," said Paribas' Mr. Atyer. "But the sample will not track every major move in the S&P.

"The problem with sampling is no one has come up with a sample to minimize tracking error."

Wayne H. Wagner, vice president of Wilshire Associates, Santa Monica, Calif., said his investment and consulting firm has surveyed funds of 100 to 500 stocks and found the larger the holdings, the smaller the tracking error. ■

Early retirement incentive offered by 7% in 1984

CHICAGO — Early retirement incentive offers in 1984 remained at a relatively low level for the second consecutive year, according to Charles D. Spencer & Associates' third annual survey.

Slightly more than 7% of the 171 employers who responded to the survey opened the early retirement window in 1984, the same as in 1983.

In 1982, however, more than 25% of the survey's respondents reported making incentive offers.

According to Spencer's report on the survey, the drop in retirement incentives can be traced to the recession of the early 1980s. Early retirement proposals became a solution for employers feeling the pinch of increased levels of competition and the heady pace of technological advancement.

Most of the employers surveyed offered early exit inducements to thin the ranks of longer-service employees without resorting to layoffs or involuntary terminations. Other reasons cited were "to provide more opportunities for promotion" and "payroll cost savings."

The retirement inducement offered most frequently by the survey respondents was some form of monthly supplement to the pensions benefits, or a bridging payment. Other incentives included actuarially unreduced pension, one-time cash payment, salary continuation at a reduced level and added service credit for faster vesting.

The majority of the offering employers instituted corporatewide benefits changes. More than half initiated health-care changes and established 401(k) plans.

Most of the offering employers aimed their incentives at people in their 50s.

As a class, the group of eligibles was somewhat younger than the group eligible in 1982 and 1983. In 1983, for instance, more than half of the offering employers focused on people at least age 60. ■

PIPER

The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. *PIPER details comparative performance data on equity and fixed-income funds at more than 200 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

Intermediate-term bonds boost funds

By Chuck Paustian

Commingled fixed-income funds with intermediate average maturities greatly improved their rankings in the most recent Pensions & Investments' Performance Evaluation Report.

The $80 million bond fund run by Bankers Life Co., Des Moines, Iowa, leaped into the top spot for the quarter ended Sept. 30 with a return of 4.6%. The fund was in the second decile in the PIPER rankings for the quarter ended June 30.

David A. Seevers, senior security analyst and portfolio manager at Bankers Life, said the fund's seven-year average maturity was responsible for the improved performance.

"The interest rate environment that existed in the third quarter, where rates were kind of flat, is the type of environment where I'd expect us to look the best," said Mr. Seevers.

The fund invests in high-yield, investment-grade private placements and commercial mortgages. However, Mr. Seevers said the fund does not invest in "junk" bonds.

"There are a lot of funds out there that call themselves junk bond funds," Mr. Seevers said. "They're taking a lot of risk but they feel the risk premium is worth the higher risk.

"They get the high yield because they're considered risky. We get the high yield because they're private placements."

The median fund in the PIPER universe outperformed the benchmark index for the quarter ended Sept. 30. The median fund returned 2.1%, compared with the Shearson Lehman Government/Corporate bond index's 2%. However, for the other periods measured, the median fund failed to top the market index.

Despite a dip in performance for the quarter, United Bank of Denver's bond fund moved into the top spot for the one-year period ended Sept. 30 with a return of 29.3%. The median fund in the universe returned 19.6% for the 12 months, while the Shearson Lehman index returned 21.2%.

(For the most recent quarter, United Bank of Denver was ranked 47th, with a return of 2.5%, after ranking second, with a return of 13.3%, for the quarter ended June 30.)

United Bank of Denver executives declined to comment on the fund's structure or investment strategy.

First Variable Life Insurance Co., Little Rock, Ark., and Trust Services of America, Los Angeles, tied for the No. 1 spot for the three years ended Sept. 30, with compound annualized returns of 18.4%. The funds had been ranked sixth and third, respectively, for the same period in the previous quarter's report.

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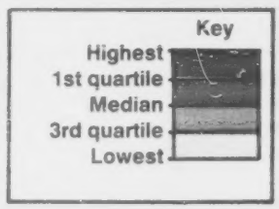
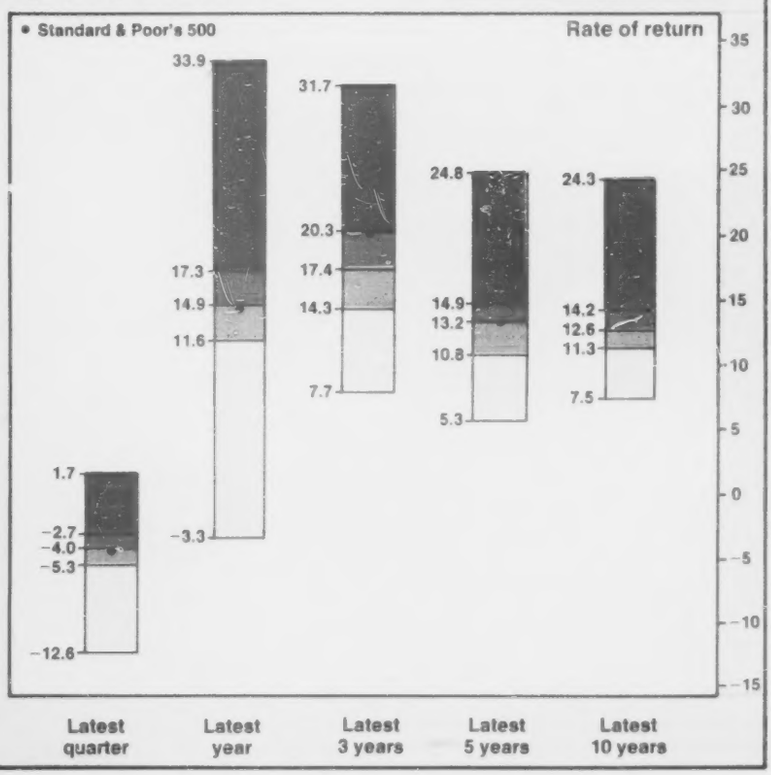
Pooled equity funds of banks and insurance companies.

All periods ending September 30, 1985, and all figures, except latest quarter, are annualized total returns.

PIPER report compiled by Rogers, Casey & Barksdale Inc.

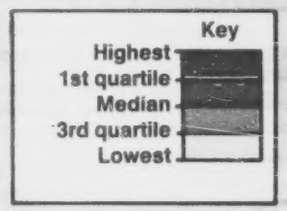


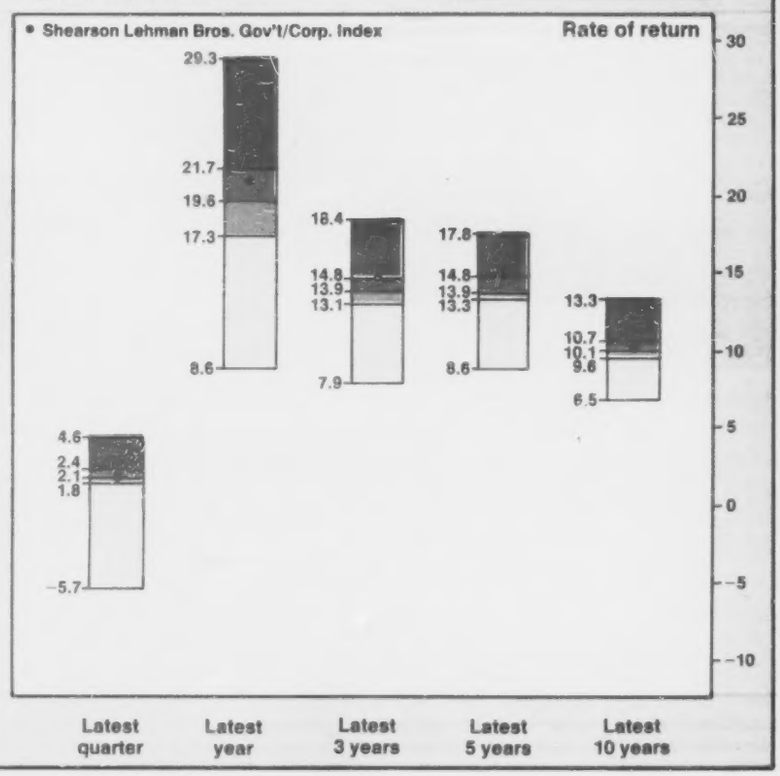


Pooled fixed-income funds of banks and insurance companies.

All periods ending September 30, 1985, and all figures, except latest quarter, are annualized total returns.

PIPER report compiled by Rogers, Casey & Barksdale Inc.





MBank values approach that made it a leader

By Ed Christman

A value approach is what helped MBank, Fort Worth, Texas, rank No. 1 for three months and No. 3 for one year among commingled equity funds in Pensions & Investments' Performance Evaluation Report.

Frank P. Ganucheau, senior vice president of MBank Fort Worth and vice president of parent MSecurities, said managers of the $8.3 million fund use a value approach, buying stocks that are out of favor with Wall Street.

That helped MBank salvage a 1.7% return for the quarter ended Sept. 30, when the Standard & Poor's 500 stock index sank to -4.1%. The median fund in the PIPER universe fared slightly better, returning -4%.

In explaining the investment approach used by MBank, Mr. Ganucheau said, "The price of a stock is most important.

"Basically, we try to own stocks that have a low price-earnings multiple and low price-to-book value. Those stocks also must be companies with a positive cash flow."

During the quarter, the portfolio consisted of 20 to 25 stocks. Of the 22 stocks in the portfolio at the end of the quarter, four were flat, seven were down and 11 were up, he reported.

Two showed significant gains: **General Foods Corp.**, up 18.5%, and **Gulf & Western Industries Inc.**, up 13%. Other good-performing stocks were **Donaldson & Co., First National Bank of Anchorage, Temple Inland Inc.** and **Brown-Forman Corp.**

To find stocks meeting his requirements, Mr. Ganucheau said he uses "the investor's equation," which is also the name of a 1984 book he wrote with William M. Bowman of Seattle-based Composite Research & Management Co.

"The investor's equation compares the price of a stock to its p/e, earnings on book value and return on equity, then compares that to the price of intermediate government bonds. (Securities) give us a payback time in years.

"If a stock's payback time is lower than a bond's, then we have a good idea."

For the quarter, MBank was followed by United of Denver, with a 1.2% return; Pioneer Bank, Chicago, 1%; and First Fidelity Bank, Newark, N.J., 0.3%.

For the one-year period ended Sept. 30, MBank's commingled fund returned 26.1%.

The top spot for the year went to Sun Banks Inc., Orlando, Fla., with a return of 33.9%. Sun Banks also led for the three- and five-year periods, with compound annualized returns of 31.7% and 24.8%, respectively.

For the one-year period, the median fund in the PIPER universe returned 14.9%, compared with 14.6% for the S&P 500.

Anthony Gray, executive vice president, said of the about $67 million Sun Banks fund: "The economy showed disappointing growth so cyclical stocks had disappointing earnings. In the areas that we emphasized, there was growth well ahead of corporate earnings."

He said the bank tends to concentrate on the big-name stocks with well-above average growth and average p/e, yields and betas. It is an approach used consistently for five years, he said.

Continued on page 35

Top quartile commingled equity funds

3-month returns

	%
MBank, Fort Worth	1.7
United of Denver	1.2
Pioneer Bank, Ill.	1.0
First Fidelity Bank, N.J.	0.3
First Alabama Bank (No. 1)	0.0
Marquette Bank, Minn.	−0.0
Northern Central, Pa.	−0.0
First of Elgin (Fund C), Ill.	−0.1
American Natl., Chicago	−0.1
Seattle Trust, Wash.	−0.4
Phoenix Mutual, Conn.	−0.4
Jefferson Trust, Ill.	−0.5
Security Norstar, N.Y.	−0.8
Society Natl., Ohio	−0.9
CNA Insurance (No. 4), Ill.	−0.9
Bancmidwest (Fund E), Ill.	−0.9
Colorado National Bank	−1.1
Massachusetts Mutual	−1.2
Landmark First Natl., Fla.	−1.2
AmSouth, Ala.	−1.2
Metropolitan Life, N.Y.	−1.2
Home Life, N.Y.	−1.3
Mercantile Safe, Mo.	−1.3
Sovran Bank, Va.	−1.3
Sun Bank, Fla.	−1.4
Wheeling Dollar Bank	−1.5
American Fletcher (Fund J), Ind.	−1.5
First of Neenah, Wis.	−1.6
Valley Natl. (No. 1), Ariz.	−1.6
First Wisconsin Trust	−1.7
US Trust, N.Y.	−1.7
First of Maryland	−1.7
Gary Wheaton Bank	−1.8
First of Omaha (Fund D)	−1.8
Southeast Bank, Fla.	−1.9
First Fidelity, N.J.	−1.9
Bankers Life, Iowa	−2.0
Fidelity Mgmt. Trust, Mass.	−2.0
American National Bank, Ind.	−2.0
First of Neenah, Wis.	−2.0
Nationwide Life Ins., Ohio	−2.1
Natl. Bank of Commerce	−2.1
United Missouri, K.C.	−2.1
American Fletcher, Ind.	−2.2
New Jersey National	−2.2
Confederation Life, Ont.	−2.2
American National Bank, Ind.	−2.3
National of Georgia	−2.3
Wilmington Trust, Del.	−2.3
US Natl. of Galveston	−2.4
Central Bank, Monroe, La.	−2.4
First Variable Life, Ark.	−2.4
Central Bank, Denver	−2.4
Travelers, Conn.	−2.4
First of Mobile, Ala.	−2.5
CIGNA Corp. (A), Conn.	−2.5
College Ret. Eq. Fund	−2.5
Interfirst Bank, Dallas	−2.5
Republic Natl., Dallas	−2.5
Wachovia Bank, N.C.	−2.6
State Natl., Evanston, Ill.	−2.7
First of Maryland	−2.7
Mutual Benefit, N.J.	−2.7
First of Chicago	−2.7
Equitable Bank, Md.	−2.7
Standard & Poor's 500	**−4.1**

1-year returns

	%
Sun Bank, Fla.	33.9
Pioneer Bank, Ill.	28.3
MBank, Fort Worth	26.1
New Jersey National	25.5
American Fletcher (Fund J), Ind.	22.6
Barnett Banks Trust Co., Fla.	22.6
State Natl., Evanston, Ill.	22.3
Summit Trust Co., N.J.	22.2
First of America, Mich.	22.2
New York Life Ins. (No. 1)	22.2
First of Neenah, Wis.	21.9
CNA Insurance (A), Ill.	21.7
Provident Mutual (No. 1), Pa.	21.7
First Interstate of Oregon	21.5
Manufacturers Detroit, Mich.	21.3
Interfirst Bank, Dallas	21.3
First of Maryland	21.0
First Jersey Natl., N.J.	20.6
Society National, Ohio	20.6
State Street Bank (Fund I), Mass.	20.5
Nationwide Life Ins., Ohio	20.4
Pittsburgh National, Pa.	20.4
First Trust Corp., Colo.	20.2
Bank of New England	20.1
Bank of California	20.0
First of Omaha (Fund D)	20.0
American National, Chicago	20.0
First of Neenah, Wis.	19.9
Prudential, N.J.	19.7
American National, Minn.	19.4
US Trust, N.Y.	19.4
First Fidelity Bank, N.J.	19.3
Mellon Bank, Pa.	19.3
Bank of Tokyo, N.Y.	19.2
Southeast Bank, Fla.	19.2
Fidelity Mgmt. Trust, Mass.	19.2
Colorado National Bank	19.2

Top equity funds by size

1-year returns

Over $100 million

	%
Manufacturers Detroit	21.3
American Natl., Chicago	20.0
Prudential, N.J.	19.7
Mellon Bank, Pa.	19.3
Fidelity Mgt. Trust, Mass.	19.2
Metropolitan Life (No. 40)	17.8
AmeriTrust, Ohio	17.7
MTrust, Texas	17.6
Bankers Life, Iowa	17.0
Provident National, Pa.	16.8

$50 million to $100 million

	%
Sun Bank, Fla.	33.9
First of America, Mich.	22.2
New York Life Ins. (No. 1)	22.2
Interfirst Bank, Dallas	21.3
First Jersey National	20.6
Republic National, Dallas	18.8
Old Kent, Mich.	18.8
Fidelity Bank, Pa.	18.4
Centerre Trust, Mo.	16.7
Hibernia National, La.	16.4

$10 million to $50 million

	%
American Fletcher (Fund J)	22.6
Barnett Banks Trust, Fla.	22.6
Summit Trust Co., N.J.	22.2
CNA Insurance (A), Ill.	21.7
First Interstate of Oregon	21.5
First of Maryland	21.0
Society National, Ohio	20.6
Nationwide Life Ins. Ohio	20.4
First Trust Corp., Colo.	20.2
Bank of New England	20.1

Under $10 million

	%
Pioneer Bank, Ill.	28.3
MBank, Fort Worth	26.1
New Jersey National	25.5
State Natl., Evanston, Ill.	22.3
First of Neenah, Wis.	21.9
State Street Bank (Fund I)	20.5
Pittsburgh Natl., Pa.	20.4
American National, Minn.	19.4
National of Georgia	19.1
Oregon Bank	19.0

10-year returns

Over $100 million

	%
US Natl. of Oregon	18.0
Bankers Life, Iowa	17.5
Provident Natl., Pa.	17.3
First Union Bank, N.C.	17.0
MTrust, Texas	16.3
Aetna Life & Cas., Conn.	16.1
Massachusetts Mutual	16.1
Manufacturers Detroit	15.6
Natl. City Cleveland	14.7
Texas Commerce	14.2

$50 million to $100 million

	%
First Wis. Natl., Madison	19.6
AmSouth, Ala.	18.3
Bessemer Trust, N.Y.	16.9
First of America, Mich.	16.5
Fifth Third Bank, Ohio	15.1
First Jersey National	14.8
United Virginia (No. 5822)	14.1
Republic Natl., Dallas	13.5
Sentry Life (B), Wis.	13.0
Old Kent, Mich.	12.8

$10 million to $50 million

	%
Manufacturers Life, Ont.	24.3
Guardian Insurance (No. 1)	20.9
US Natl. of Galveston	19.0
First Variable Life, Ark.	18.9
First Trust Corp., Colo.	18.1
First of Omaha (Fund D)	17.4
Landmark Union Trust, Fla.	17.3
First of Oklahoma	17.0
Nationwide Life Ins., Ohio	16.6
New England Mutual	16.0

Under $10 million

	%
Citizens Chillicothe (B)	18.3
Confederation Life, Ont.	18.0
MBank, Fort Worth	16.6
Wheeling Dollar Bank	14.6
Lake Shore Natl., Ill.	14.3
Union Central, Ohio	14.3
First of Neenah, Wis.	13.8
Pittsburgh Natl.	13.8
Central Fidelity, Va.	13.6
First of Warsaw, Ind.	13.4

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1200 First Union Plaza, CMG16 Charlotte, NC 28288

*Based on Risk/Return Performance Comparisons report issued by Frank Russell Company for Investment Advisor Separate Accounts and Balanced Separate Accounts for five years ending 12/31/84

tional of Georgia 19.1
egon Bank 19.0
tl. Bank of Commerce, Neb. . . 19.0
st Wisconsin Trust 19.0
Natl. of Galveston 18.9
public National, Dallas 18.8
curity Norstar Bank, N.Y. . . . 18.8
d Kent, Mich. 18.8
ntral Fidelity, Va. 18.4
delity Bank, Pa. 18.4
st Interstate of Nevada 18.3
st of Maryland 18.2
anch Bank & Trust, N.C. 18.1
st Kentucky Trust 18.1
tsburgh National, Pa. 18.1
tl. Bank of Commerce, Tenn. . 18.1
rris Trust, Ill. 18.0
w England Mutual, Mass. 18.0
nk of California 17.9
tropolitan Life (No. 40), N.Y. . 17.8
eriTrust, Ohio 17.7
rthern Central, Pa. 17.6
izens Chillicothe (B), Mo. . . . 17.6
Trust, Texas 17.6
erican Fletcher, Ind. 17.3
attle Trust, Wash. 17.3
ndard & Poor's 500 . . . . . **14.6**

3-year returns

	%
n Bank, Fla.	31.7
nufacturers Life, Ont.	30.9
st Union Bank, N.C.	28.1
st Variable Life, Ark.	27.3
nk of New England	27.0
Bank, Fort Worth	27.0
st Interstate of Oregon	26.6
elity Mgmt. Trust, Mass.	25.9
vident National, Pa.	25.5
st Fidelity Bank, N.J.	25.3
dential, N.J.	24.7
ublic Natl., Dallas	24.3
ardian Insurance (No. 1), N.Y.	24.1
st of Omaha (Fund D)	23.7
st Wisconsin Natl., Madison	23.6
rcantile Safe, Md.	23.6
nufacturers, Detroit, Mich.	23.6
n Hancock (No. 1L), Mass.	23.5
neer Bank, Ill.	23.4
llon Bank, Pa.	23.2
e Shore National, Ill.	23.2
st Alabama, Mobile	22.7
tual Benefit, N.J.	22.6
nkers Life, Iowa	22.6
gon Bank	22.6
Natl. of Galveston	22.5
erican Fletcher (Fund J), Ind.	22.4
l. Bank of Commerce, Tenn.	22.4
South, Ala.	22.3
len Bank, Texas	22.3
w Jersey National	22.3
erican National, Chicago	22.2
rine Midland, N.Y.	22.1
tionwide Life Ins., Ohio	21.9
Kent, Mich.	21.8
ted of Denver, Colo.	21.8
orado National Bank	21.7
trust, Conn.	21.7
st of Chicago	21.7
ng Trust, N.Y.	21.5
rcantile Trust, Mo.	21.5
Trust, N.Y.	21.5
nterre Trust, Mo.	21.4
st of Warsaw, Ind.	21.3
n Hancock (No. 1k), Mass.	21.3
n Mutual Life (A), Pa.	21.0
ntinental Bank, Pa.	21.0
curity Norstar Bank, N.Y.	20.9
te National, Evanston, Ill.	20.9
lege Ret. Eq. Fund	20.9
st of America, Mich.	20.9
eriTrust, Ohio	20.7
utheast Bank, Fla.	20.6
st Trust Corp., Colo.	20.6
w England Mutual, Mass.	20.5
ciety National, Ohio	20.5
dmark Union Trust, Fla.	20.4
ttle Trust, Wash.	20.4
nfederation Life, Ont.	20.3
st Wisconsin Trust	20.3
eeling Dollar Bank, W. Va.	20.3
st Fidelity Bank, N.J.	20.3
ndard & Poor's 500	**20.1**

5-year returns

	%
n Bank, Fla.	24.8
nufacturers Life, Ont.	22.4
st Union Bank, N.C.	22.0
st Fidelity Bank, N.J.	20.9
st Variable Life, Ark.	20.2
nufacturers Detroit, Mich.	19.6
source Bank & Trust, Minn.	19.5
South, Ala.	19.3
ank, Fort Worth	18.9
e Shore National, Ill.	18.8
vident National, Pa.	18.6
st of Oklahoma	18.5
ted of Denver	18.4
Natl. of Galveston	18.3
st of Omaha (Fund D)	18.1

American National, Chicago 18.0
Guardian Insurance (No. 1), N.Y. 17.9
Nationwide Life Ins., Ohio 17.9
First Interstate of Oregon 17.9
Prudential, N.J. 17.4
New England Mutual 17.4
Midlantic National, N.J. 17.2
First Wisconsin Trust 17.2
Mutual Benefit, N.J. 17.1
Massachusetts Mutual 17.0
Bank of Tokyo, N.Y. 17.0
Pioneer Bank, Ill. 16.9
US Natl. of Oregon 16.8
Landmark Union Trust, Fla. . . . 16.7
Wheeling Dollar Bank, W. Va. . . 16.7
American Fletcher (Fund J), Ind. 16.7
Colorado National Bank 16.7
First Wisconsin Natl., Madison . . 16.5
Dauphin Deposit, Pa. 16.4
Natl. Bank of Commerce, Tenn. 16.3

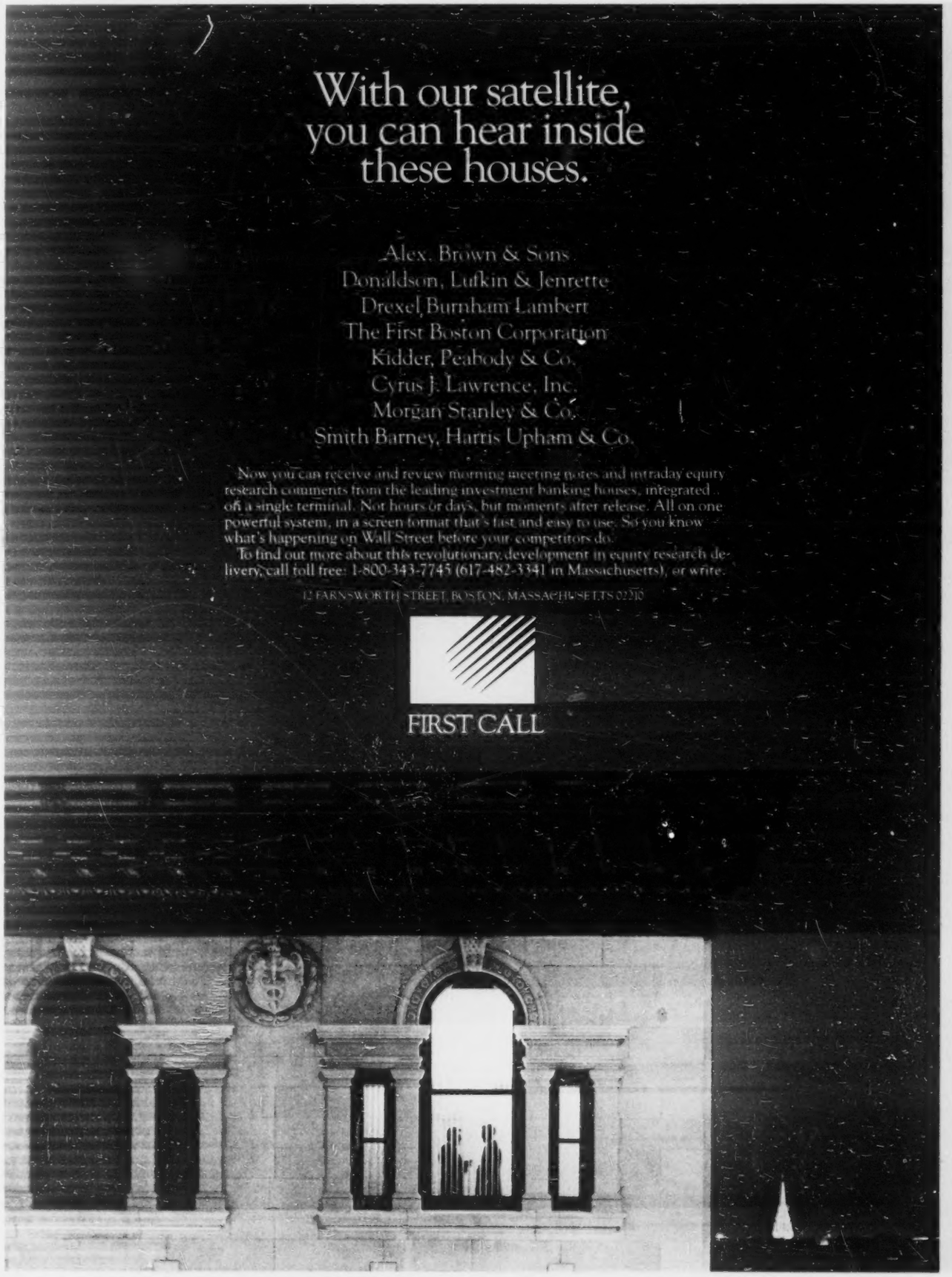
Union Central, Ohio 16.3
Confederation Life, Ont. 16.2
Centerre Trust, Mo. 16.0
First of America, Mich. 16.0
First Alabama Bank (I) 15.9
First Security Natl., Ky. 15.9
New Jersey National 15.7
Dominion Trust, Va. 15.7
Security Norstar Bank, N.Y. . . . 15.6
Mercantile Safe, Md. 15.6
First Tennessee, Chat. 15.5
Citytrust, Conn. 15.5
Southeast Bank, Fla. 15.5
Barnett Banks Trust, Fla. 15.4
Minnesota Mutual (C) 15.3
First of Warsaw, Ind. 15.3
Gary Wheaton Bank, Ill. 15.3
First in Bartlesville, Okla. 15.2
Texas Commerce 15.2
AmeriTrust, Ohio 15.1

Old Kent, Mich. 15.1
Mid-State Bancorp, Pa. 15.0
State Street Bank, Mass. 14.9
Republic Natl., Dallas 14.9
United Virginia Bank (No. 5822) . 14.9
Standard & Poor's 500 . . . . . **13.2**

10-year returns

	%
Manufacturers Life, Ont.	24.3
Guardian Insurance (No. 1), N.Y.	20.9
First Wisconsin Natl., Madison	19.6
US National of Galveston	19.0
First Variable Life, Ark.	18.9
Citizens Chillicothe (B), Mo.	18.3
AmSouth, Ala.	18.3
First Trust Corp, Colo.	18.1
Confederation Life, Ont.	18.0
US National of Oregon	18.0
Bankers Life, Iowa	17.5

First of Omaha (Fund D) 17.4
Landmark Union Trust, Fla. . . . 17.3
Provident National, Pa. 17.3
First Union Bank, N.C. 17.0
First of Oklahoma 17.0
Bessemer Trust, N.Y. 16.9
Nationwide Life Ins., Ohio 16.6
MBank, Fort Worth, Texas 16.6
First of America, Mich. 16.5
MTrust, Texas 16.3
Aetna Life & Casualty, Conn. . . . 16.1
Massachusetts Mutual 16.1
New England Mutual 16.0
First Interstate of Denver 15.9
Natl. Bank of Commerce, Neb. . . 15.8
First Interstate of Oregon 15.7
United of Denver 15.6
Manufacturers Detroit, Mich. . . . 15.6
Colorado National Bank 15.3
Penn Mutual Life (A), Pa. 15.3



Fifth Third Bank, Ohio	15.1
Security Norstar Bank, N.Y.	14.9
First Jersey National, N.J.	14.8
Continental Bank, Pa.	14.8
Employers Life of Wausau (No. 1)	14.8
First Tennessee, Chat.	14.7
National City Cleveland	14.7
Home Life, N.Y.	14.6
Wheeling Dollar Bank, W. Va.	14.6
Citytrust, Conn.	14.4
Liberty National, Okla.	14.4
Lake Shore National, Ill.	14.3
Union Central, Ohio	14.3
Bank of Oklahoma, Tulsa	14.3
First National, Lincoln	14.3
American Fletcher (Fund J), Ind.	14.2
Society National, Ohio	14.2
Texas Commerce	14.2
Standard & Poor's 500	13.5

Top quartile commingled fixed-income funds

3-month returns

	%
Bankers Life, Iowa	4.6
Morgan Guaranty, N.Y.	3.8
Citicorp, N.Y.	3.6
Landmark First Natl., Fla.	3.1
Travelers (D), Conn.	3.1
United Carolina Bank, N.C.	3.0
First of Neenah, Wis.	3.0
First of Kenosha (4002), Wis.	2.9
Manufacturers Hanover, N.Y.	2.9
Calcasieu Marine Natl., (E), La.	2.9
Security Norstar Bank, N.Y.	2.9
United Missouri, K.C.	2.9
Crown Life, Ont.	2.9
First National, Jackson, Miss.	2.9
Mutual of New York	2.9
Dauphin Deposit, Pa.	2.8
Beverly Bank, Ill.	2.8
Manufacturers Detroit, Mich.	2.8
US Trust, N.Y.	2.8
Chemical Bank (No. 1), N.Y.	2.8
First of Penna, Erie	2.8
First of Maryland	2.8
General American (9), Mo.	2.8
Mercantile Safe, Md.	2.8
IAA Trust Co. (B), Ill.	2.7
Aetna Life & Cas. (No. 76), Conn.	2.7
Chase Manhattan (A), N.Y.	2.7
Metropolitan Life (No. 41), N.Y.	2.6
First Interstate of Wis.	2.6
Summit Bank, Ind.	2.6
Hawaiian Trust	2.6
Bessemer Trust, N.Y.	2.6
Seafirst Bank, Wash.	2.6
Equitable Bank, Md.	2.6
First Kentucky Trust	2.6
Mutual of New York	2.6
First of Warsaw, Ind.	2.6
Dauphin Deposit, Pa.	2.6
Philadelphia National, Pa.	2.6
Sovran Bank, Va.	2.6
American National, Minn.	2.6
First National, Lincoln, Neb.	2.6
First Variable Life, Ark.	2.6
Fourth National, Wichita, Kan.	2.6
Connecticut National Bank	2.5
First of Boston	2.5
United of Denver	2.5
AmeriTrust, Ohio	2.5
First Fidelity Bank, N.J.	2.5
Life of Virginia	2.5
Indiana National Bank	2.5
Unibanctrust, Ill.	2.5
Comerica Bank, Mich.	2.5
Citizens Fidelity (F), Ky.	2.4
Gary Wheaton Bank, Ill.	2.4
First of Oklahoma	2.4
Citizens & Southern, Ga.	2.4
First Security Natl. (F), Ky.	2.4
Rainier Natl. (F), Wash.	2.4
First Bank, Milwaukee, Wis.	2.4
Hamilton Bank, Pa.	2.4
Mercantile Safe, Md.	2.4
Merchants Natl., Ind.	2.4
Natl. Bank of Commerce, Neb.	2.4
Shearson Lehman Index	2.0

1-year returns

	%
United of Denver	29.3
Life of Virginia	28.1
First Interstate of Nevada	27.1
Centerre Trust, Mo.	26.9
AmSouth, Ala.	26.5
First Interstate of Denver	26.0
Connecticut National Bank	25.7
Trust Svcs of Amer., Calif.	25.2
Bankers Life, Iowa	25.0
Travelers (P), Conn.	24.8
Society National, Ohio	24.8
Colorado National Bank	24.4
Fourth Natl., Wichita, Kan.	24.0
John Hancock, Mass.	23.8
Security Norstar Bank, N.Y.	23.7
Hawaiian Trust	23.7
Manufacturers Hanover, N.Y.	23.6

Top fixed funds by size

1-year returns

Over $100 million

	%
Life of Virginia	28.1
Centerre Trust, Mo.	26.9
John Hancock, Mass.	23.8
Manufacturers Hanover	23.6
American Security, D.C.	23.4
Aetna Life & Cas. (No. 76)	23.3
Morgan Guaranty, N.Y.	23.3
Wachovia Bank, N.C.	23.2
Texas Commerce	22.8
CIGNA Corp., Conn.	22.4

$50 million to $100 million

	%
First Interstate of Denver	26.0
Bankers Life, Iowa	25.0
Fifth Third Bank, Ohio	22.7
Chemical Bank (No. 1), N.Y.	22.6
Continental Illinois	22.4
Comerica Bank, Mich.	22.2
Sovran Bank, Va.	21.7
Mutual of New York	21.3
Provident Natl., Pa.	21.3
Boatmen's Natl., Mo.	21.0

$10 million to $50 million

	%
United of Denver	29.3
AmSouth, Ala.	26.5
Trust Svcs of Amer., Calif.	25.2
Travelers (P), Conn.	24.8
Society National, Ohio	24.8
Colorado National Bank	24.4
Fourth Natl., Wichita	24.0
Hawaiian Trust	23.7
Manufacturers Detroit	23.2
Connecticut National Bank	23.1

Under $10 million

	%
First Interstate of Nevada	27.1
Connecticut National Bank	25.7
Security Norstar Bank, N.Y.	23.7
Northern Central, Pa.	23.5
Bank of California	23.5
Beverly Bank, Ill.	23.2
IAA Trust Co. (B), Ill.	23.2
American National, Minn.	23.2
Central Fidelity, Va.	22.6
Manufacturers Life, Ont.	22.3

10-year returns

Over $100 million

	%
Life of Virginia	12.7
Texas Commerce	12.3
American Security, D.C.	11.6
Manufacturers Hanover	11.5
Centerre Trust, Mo.	11.5
John Hancock, Mass.	11.3
CIGNA Corp., Conn.	10.7
NCNB National Bank, N.C.	10.4
Wachovia Bank, N.C.	10.4
First of Chicago	10.4

$50 million to $100 million

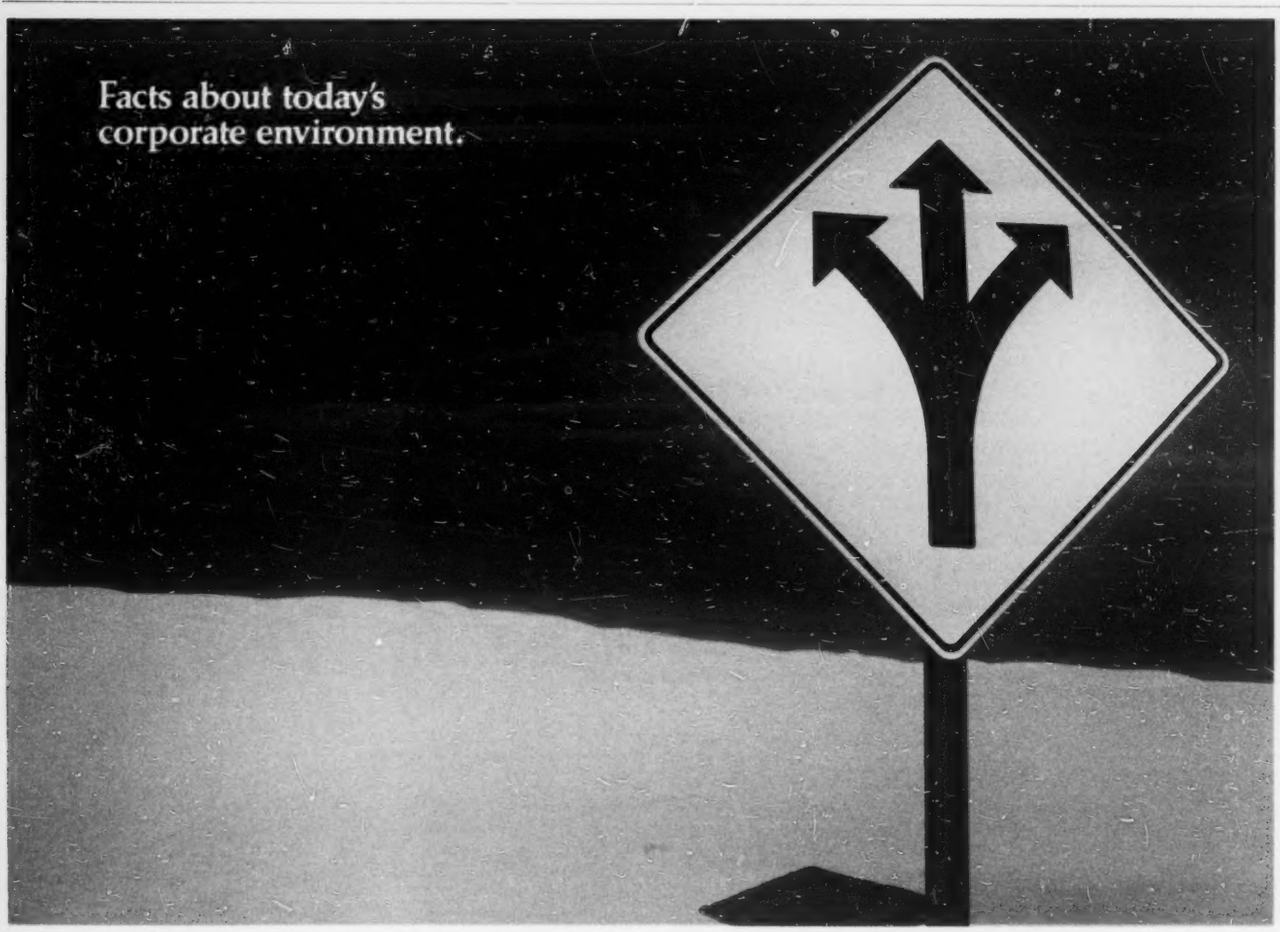
	%
Sovran Bank, Va.	12.8
Hibernia National, La.	11.4
Mercantile Trust, Mo.	11.1
American Natl., Chicago	10.5
First Interstate of Denver	10.4
Provident Natl., Pa.	10.0
Comerica Bank, Mich.	10.0
Marine Midland, N.Y.	9.9
Norwest Bank, Minn.	9.6
Chemical Bank (No. 1), N.Y.	9.5

$10 million to $50 million

	%
Fourth Natl., Wichita	13.3
Pacific Mutual, Calif.	12.8
First Jersey Natl.	12.1
Seafirst Bank, Wash.	12.0
Fidelity Bank, Pa.	11.8
First Interstate of Calif.	11.8
Jefferson Trust, Ill.	11.7
Commerce Union, Tenn.	11.6
First Fidelity Bank, N.J.	11.4
United of Denver, Colo.	11.4

Under $10 million

	%
Beverly Bank, Ill.	12.3
Central Fidelity, Va.	11.9
First of Neenah, Wis.	10.9
Key Trust Co., N.Y.	10.8
MBank, Austin	10.7
First in Bartlesville	10.7
First of Penna, Erie	10.6
First of Neenah, Wis.	10.6
First Midwest, Moline, Ill.	10.6
Oregon Bank	10.5



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Manufacturers Detroit, Mich.	23.2
American National, Minn.	23.2
Connecticut National Bank	23.1
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First Wis. Natl., Madison	22.5
Associated Manitowoc, Wis.	22.5
Republic Natl., Dallas	22.5
Northern Trust, Ill.	22.4
Continental Illinois	22.4
CIGNA Corp., Conn.	22.4
Bank of New England	22.3
First Interstate of Calif.	22.3
Manufacturers Life, Ont.	22.3
Comerica Bank, Mich.	22.2
MBank, Austin, Texas	22.2
First City Natl., Houston	22.1
Colonial American Natl., Va.	22.0
National City, Cleveland	22.0
First Jersey National, N.J.	21.9
Landmark First Natl., Fla.	21.8
First Kentucky Trust	21.8
US National of Oregon	21.8
First of Minneapolis	21.8
US Trust, N.Y.	21.7
First National, Lincoln	21.7
First of Chicago	21.7
Liberty National, Ky.	21.7
Sovran Bank, Va.	21.7
Shearson Lehman Index	**21.2**

3-year returns

	%
First Variable Life, Ark.	18.4
Trust Svcs of Amer., Calif.	18.4
Central Fidelity, Va.	18.3
Life of Virginia	18.1
United of Denver	18.0
Mutual of New York	17.6
IAA Trust Co. (Fund B), Ill.	17.5
First Wis. Natl., Madison	17.4
Beverly Bank, Ill.	17.1
CIGNA Corp., Conn.	17.0
California First Bank	16.9
First Kentucky Trust	16.9
Travelers (D), Conn.	16.7
First Interstate of Denver	16.6
Lloyds Bank (Fund C), Calif.	16.6
Key Trust Co., N.Y.	16.6
John Hancock, Mass.	16.6
Mutual of New York	16.6
First Alabama, Mobile	16.6
First of Neenah, Wis.	16.5
MBank, Austin, Texas	16.4
Morgan Guaranty, N.Y.	16.4
First Interstate of Calif.	16.3
Connecticut National Bank	16.3
AmSouth, Ala.	16.2
Sovran Bank, Va.	16.2
State Street Bank, Mass.	16.2
First Interstate of Nevada	16.1
Colorado National Bank	16.1
Citicorp, N.Y.	16.0
Colonial American Natl., Va.	15.9
Hamilton Bank, Pa.	15.9
First of Chicago	15.7
Society National, Ohio	15.7
Pacific Mutual, Calif.	15.7
Marine Midland, N.Y.	15.6
American Security, D.C.	15.5
Toledo Trust, Ohio	15.5
First of Omaha (Fund C)	15.5
Security Norstar Bank, N.Y.	15.5
Centerre Trust, Mo.	15.5
Pioneer Bank, Ill.	15.5
Manufacturers Detroit	15.4
General American (No. 9), Mo.	15.2
Bank of California	15.1
Liberty National, Ky.	15.1
First of Maryland	15.0
Liberty National, Okla.	15.0
First Jersey Natl., N.J.	15.0
Mellon Bank, Pa.	15.0
First of Warsaw, Ind.	15.0
National of Georgia	14.9
CIGNA Corp., Conn.	14.9
Shearson Lehman Index	**14.9**

5-year returns

	%
Life of Virginia	17.8
Sovran Bank, Va.	17.2
First Kentucky Trust	16.8
Allied Bank, Texas	16.4
CIGNA Corp., Conn.	16.3
United of Denver	16.2
Travelers (D), Conn.	16.2
Trust Svcs of Amer., Calif.	16.1
First Interstate of Denver	16.1
Beverly Bank, Ill.	16.0
First Interstate of Calif.	16.0
Pacific Mutual, Calif.	15.9
Central Fidelity, Va.	15.9
Mutual of New York	15.9
Connecticut National Bank	15.9
John Hancock, Mass.	15.9
American Security, D.C.	15.8
Society National, Ohio	15.8
Centerre Trust, Mo.	15.8
Lloyds Bank (Fund C), Calif.	15.8
First Wis. Natl., Madison	15.7
Citicorp, N.Y.	15.7
First Variable Life, Ark.	15.6
Marine Midland, N.Y.	15.6
Cullen Bank, Texas	15.6
Mellon Bank, Pa.	15.6
Fourth Natl., Wichita, Kan.	15.5
Seafirst Bank, Wash.	15.5
First of Maryland	15.4
Morgan Guaranty, N.Y.	15.4
California First Bank	15.4
State Street Bank, Mass.	15.3
Mutual of New York	15.3

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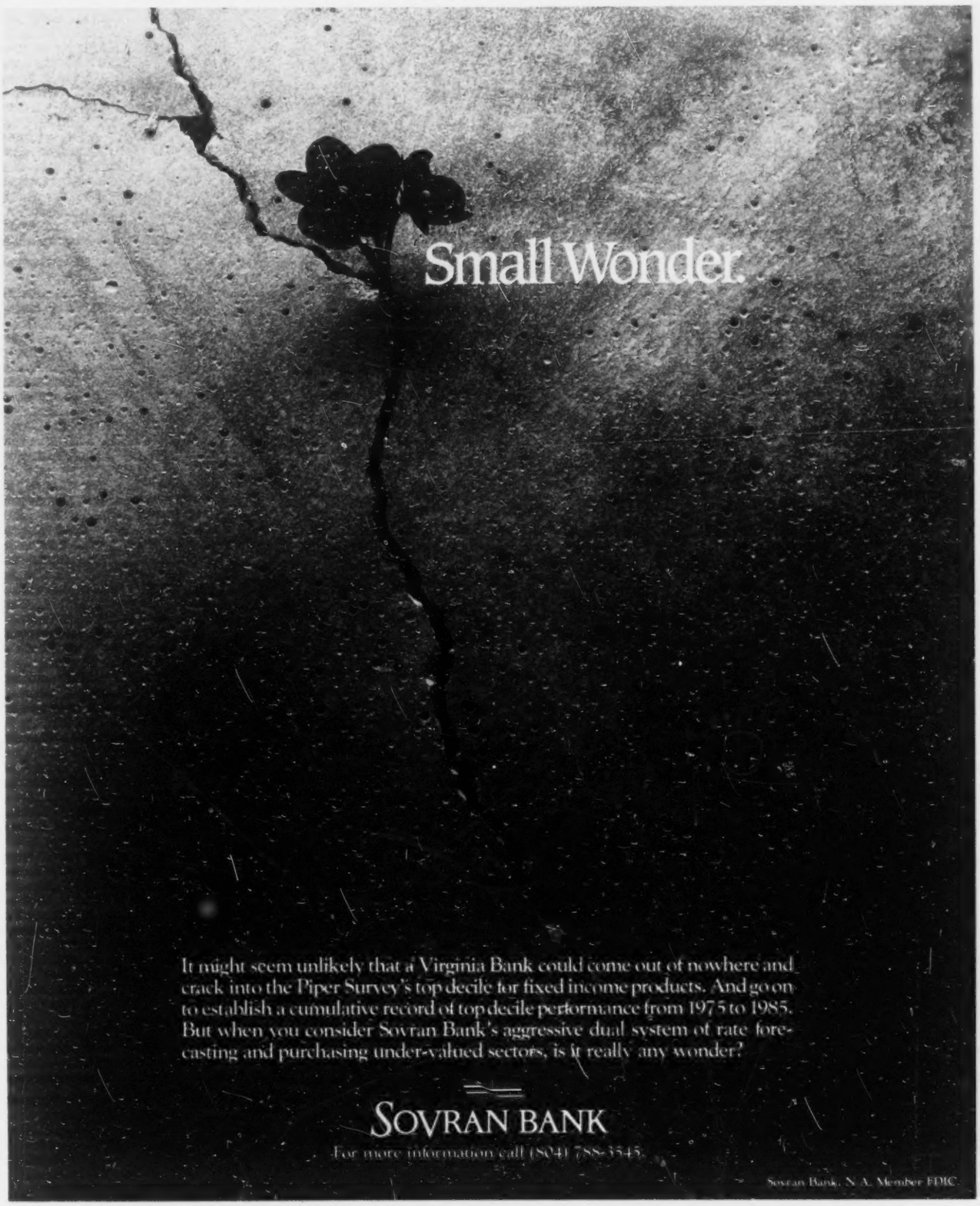

Intermediate . . .

Continued from page 29

The $4 million commingled fixed-income fund of Central Fidelity Bank, Richmond, Va., made the biggest jump for the three-year period of the top five funds. Central Fidelity ranked third with a compound annualized return of 18.3%, up from its ninth place finish for the same period in the previous quarter.

"Our general approach has been to be somewhat risk averse. We try to do some interest rate anticipation," said Boyce G. Reid, senior vice president of CFB Advisory Corp, Richmond, the bank's investment management subsidiary.

Mr. Reid said the fund's average maturity, which falls within a four- to 10-year range, partially accounted for the fund's improvement.

"The fund is balanced between intermediate-term, federal agency securities and the intermediate-term, sinking fund discount (bonds).

"To some extent, we have been able to shift maturities from somewhat longer to somewhat shorter maturities to take advantage of interest rate swings," he said.

For the three-year period, the median fund in the PIPER universe had a compound annualized return of 13.1%, compared with the Shearson Lehman index's 14.9%.

The top two funds for the five-year period exchanged positions from the previous quarter's report.

For the period ended Sept. 30, the Life Insurance Co. of Virginia, Richmond, finished first, with a compound annualized return of 17.8%, followed by Sovran Bank, also in Richmond, with 17.2%.

The $36 million fixed-income fund of First Kentucky Trust Co., Louisville, moved into the third spot, with a compound annualized return of 16.8%, up from its seventh-place ranking for the same period in the previous quarter's report.

William F. Chandler, senior vice president of First Kentucky, said although the fund's average maturity falls into the intermediate range, the investment strategy emphasizes selection of particular securities.

"We are very active in the management of the fund. Turnaround ranges from 100% to a couple hundred percent in a year. We invest the fund to maintain an average maturity in and around the Shearson Lehman Government/Corporate bond index," he said.

"We spend a lot of time on selection and reselection. We do a lot of bond swaps," he said.

For the most part, Mr. Chandler said, the fund's good performance has been the result of "active repositioning" and not of maturity alteration.

The only exception to this, he said, was 1982, when selection process also resulted in a good market-timing decision.

"It happens that the bonds that we bought, whether they be government or corporate, had a longer average maturity than the Shearson Lehman index," so the bonds performed well when interest rates declined, he said.

"That was the one year where good selection was augmented by a good timing move, although it wasn't designed that way," Mr. Chandler said.

For the five-year period, the median fund returned a compound annualized 13.9%, and the Shearson Lehman index, 14.9%.

For the fifth consecutive quarter, the Fourth National Bank and Trust Co., Wichita, Kan., was the top performing fund for the 10-year period. Fourth National had a compound annualized return of 13.3% for the period ended Sept. 30.

For the same period, the median fund returned a compound annualized 10.1%, compared with the Shearson Lehman's 10.3%.

While Fourth National has maintained its top ranking, the next four funds have wrestled each other for position among the remaining spots in the top five.

For the period ended Sept. 30, Fourth National was followed by Pacific Mutual Life Insurance Co., Newport Beach, Calif., and Sovran Bank, each with compound annualized returns of 12.8%; Life Insurance Co. of Virginia, 12.7%; and Beverly Bank, Chicago, 12.3%. ■

Commerce Union, Tenn.	15.3
Bank of California	15.2
Key Trust Co., N.Y.	15.2
AmSouth, Ala.	15.2
Fidelity Bank, Pa.	15.2
Colonial Am. Natl., Va.	15.1
First of Omaha (Fund C)	15.1
First Interstate of Nevada	15.0
Wachovia Bank, N.C.	15.0
Manufacturers Hanover, N.Y.	14.9
IAA Trust Co. (Fund B), Ill.	14.9
First Bank, Milwaukee, Wis.	14.9
First Fidelity Bank, N.J.	14.9
Colorado National Bank	14.9
Shearson Lehman Index	**14.9**

10-year returns

	%
Fourth Natl., Wichita, Kan.	13.3
Pacific Mutual, Calif.	12.8
Sovran Bank, Va.	12.8
Life of Virginia	12.7
Beverly Bank, Ill.	12.3
Texas Commerce	12.3
First Jersey National, N.J.	12.1
Seafirst Bank, Wash.	12.0
Central Fidelity, Va.	11.9
Fidelity Bank, Pa.	11.8
First Interstate of Calif.	11.8
Jefferson Trust, Ill.	11.7
American Security, D.C.	11.6
Commerce Union, Tenn.	11.6
Manufacturers Hanover, N.Y.	11.5
Centerre Trust, Mo.	11.5
First Fidelity Bank, N.J.	11.4
United of Denver	11.4
Hibernia National, La.	11.4
John Hancock, Mass.	11.3
First Wis. Natl., Madison	11.3
Manufacturers Detroit	11.2
First Kentucky Trust	11.2
Mercantile Trust, Mo.	11.1
Lloyds Bank (Fund C), Calif.	11.1
Allied Bank, Texas	11.0
First of Neenah, Wis.	10.9
Cullen Bank, Texas	10.9
California First Bank	10.9
Trust Svcs of Amer., Calif.	10.9
American National Bank, Tenn.	10.9
Mellon Bank, Pa.	10.8
Toledo Trust, Ohio	10.8
Key Trust Co., N.Y.	10.8
MBank Austin, Texas	10.7
CIGNA Corp., Conn.	10.7
US Trust, N.Y.	10.7
Indiana National Bank	10.7
Bank of New England	10.7
First in Bartlesville, Okla.	10.7
AmeriTrust, Ohio	10.7
Shearson Lehman Index	**10.3**

The partnership at work. Dick Fulljames, Treasurer of General Electric Pension Trusts (center), discusses global custody with Dave Mann, Chase NY (left) and Colin Grimsey, Chase London.

Global Network **Foreign Exchange**

MBank at . . .

Continued from page 29

"The portfolio has a large concentration in regional banks, property and casualty insurance companies, food and drug stocks," Mr. Gray said.

Among the fund's good-performing stocks are **The Chubb Corp.**, **First Florida Banks**, **Landmark Bank of Florida**, **General Foods Corp.**, **Quaker Oats Co.**, and **KinderCare Learning**, he said.

Paper, machinery and energy — heavy cyclical stocks — were absent from the portfolio. He observed however, that not being in energy "is not helping me much this month. Still, I don't like energy long term."

Mr. Gray said the portfolio did have some cyclical stocks but "I think each stock is unique and has something going for it. They are characterized by excellent management." He included **AMR Corp.**, **Masco Corp.**, and **Cooper Industries Inc.** in that list.

Another aspect of Sun Banks' approach is very active trading.

"We get significant improvement out of trading, which is contrary to most managers. The average manager does a disservice by trading."

In addition to Sun Banks and MBank, the other top performers for the year were Pioneer Bank, with a 28.3% return; New Jersey National Bank, Trenton, 25.5%; and American Fletcher National Bank, Indianapolis, 22.6%.

The Pioneer Bank commingled equity fund, which has about $1 million, is run by Gofen & Glossberg Inc.

Mark R. Goodman, a principle who runs the fund, said the key theme behind the fund's strong showing was "finding stocks that could sidestep the questionable economy. We felt that the environment was favorable to common stocks but the selection process was critical."

Mr. Goodman said he looks for ideas using a bottom-up approach.

He said the fund had about 12 to 15 names, with about a 35% concentration in cable, broadcast and media stocks. Also, he likes special situation stocks and interest sensitive ideas.

Among the stocks that helped the fund achieve its performance were **Storer Communications Inc.**, **Newhall Land/Farming**, **Gulf & Western Industries**, **RCA Corp.**, **United Artists Communications** and **Tele-Communications**, Class A.

Mr. Goodman said he still likes the cable stocks on a long-term basis because of impending deregulation, which he believes hasn't been adequately reflected in the market.

Following Sun Banks for the three years were Manufacturers Life Insurance Co., Toronto, with a compound annualized return of 30.9%; First Union National Bank, Charlotte, N.C., with 28.1%; and First Variable Life, Little Rock, Ark., with 27.3%. For the three-year period, the median PIPER fund returned a compound annualized 17.4%, while the S&P returned 20.1%.

For the five years ended Sept. 30, Sun Banks again was followed by Manufacturers Life, with a compound annualized 22.4%; First Union National Bank with 22%; First Fidelity Bank, 20.9%; and First Variable Life, 20.2%.

The median fund in the PIPER universe and the S&P 500 both returned 13.2% for the five-year period.

Manufacturers Life topped the 10-year period ended Sept. 30, returning a compound annualized 24.3%.

Manufacturers Life's $42.5 million fund uses "a modified value approach," said Donavon McKerchar, assistant investment vice president. Mr. McKerchar said the fund owed its good performance earlier to small technology stocks and, more recently, to the Bell regional stocks, among others.

"We use a modified value approach," Mr. McKerchar said. "We don't insist on low p/e stocks, just stocks that seem to be undervalued.

"We have a predilection toward medium and small companies although we own large ones, too."

He said cash levels can vary, but he likes to buy before the market hits the bottom and sell before it hits the top.

He said the fund was fairly heavy in smaller technology stocks that had been battered, including **Compaq**, a recent purchase. The fund bought a sizable portion at "a very nice price," he said.

Looking ahead, "we think the place to be is cyclically exposed, including technology, paper, trucking and some retail stocks," Mr. McKerchar said.

Other top performers for the 10-year period ended Sept. 30 were Guardian Life Insurance Co. of America, New York, with a compound annualized 20.9%; First Wisconsin National Bank of Madison, 19.6%; United States National Bank, Galveston, Texas, 19%; and First Variable Life, 18.9%.

For the 10-year period, the median fund in the PIPER universe returned a compound annualized 12.6%, compared with the S&P's 13.5%. ■

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Firms issue fund updates

Several investment managers have issued equity fund performance updates.

For the first six months of 1985, Jenswold, King & Associates, Houston, reported equity performance was up 15.9% with about 13% cash reserves. The nine-year return through Dec. 31, 1984, was up 21.6%, compounded annually.

Equity accounts at Bear Stearns Asset Management, New York, were up 18.8% for the first three quarters of 1985, according to a news release. The Standard & Poor's 500 stock index was up 12.3% for the year to date. For the quarter ended Sept. 30, the firm was down 3.9%, compared with the S&P 500's 4.1% drop.

Greenspan O'Neil Associates, New York, reported a 6.6% decline in equity performance for the quarter ended Sept. 30. For the first nine months of the year, however, it was up 4.3%. ■

Defined contribution plans

Owens-Corning Fiberglas officials do not view their defined contribution plan as part of the company's retirement package. A closer look at the fiberglass manufacturer's employee benefits program is on page 50.

The profit-sharing contribution plan at Halliburton Co., Dallas, has served as the oil field services company's primary retirement vehicle for more than 40 years. Story on page 46.

NCR Corp., whose headquarters in Dayton, Ohio, is pictured below, recently added a fourth investment option — a family of four mutual funds — for participants in its 401(k) plan. Story on page 40.

Fund execs trade investing for paper work

THE MOVE to defined contribution plans has resulted in a new ballgame for the players in an industry that has concentrated on defined benefit plans for decades. To determine how the players are affected by that new game, *Pensions & Investment Age* reporters Ed Christman, Rose Darby and Alan Krauss interviewed dozens of corporate pension executives, money managers, consultants and master trustees.

Their two-part report appears below and on page 42.

Corporate pension executives with defined contribution plans say they have more complex administrative responsibilities but simpler investment management structures than with defined benefit plans.

Overall, "you find yourself becoming a loan officer, processing applications, sending them and the appropriate paper work to the trustees, instead of attending to other parts of your job," said an employee benefits manager of a central Ohio manufacturing company.

Monitoring a guaranteed investment contract portfolio that comprises 88% of $42 million in employee benefit assets has resulted in "my department becoming a GIC administration function," said William Stavro, assistant treasurer of Mattel Inc., Hawthorne, Calif.

Mattel terminated its defined benefit plan and replaced it with a defined contribution plan about two years ago. With employees participating in asset allocation now, Mr. Stavro has seen a big move to GICs.

The changes at Mattel and other companies are due, in large part, to the fact that defined contribution assets, unlike those in defined benefit plans, are placed in more conservative and less diversified investments.

Ethan C. Allen, treasurer of Bata Shoe Co. Inc., Belcamp, Md., said he welcomed the shift to defined contribution plans because it relieved him of anxiety-producing investment management decisions.

Bata terminated three defined benefit plans — one in 1984 and two in 1985 — with about $19 million in assets and replaced them with savings plans that by the end of 1986 are expected to have total assets of $8 million.

"It has made our life as a management organization less difficult," Mr. Allen said. "Because we were a relatively small asset base, management of the pension assets was not our full-time responsibility. We had a company with assets of $138 million and 8,000 employees, compared to $19 million in pension assets that were the part-time responsibility of just two people. We were worrying about asset allocation and whether we should be in real estate, fixed income or what.

"Now we have a situation in which we have identified what the company can afford to pay, and we've adopted a risk-averse posture . . . That's made life simpler for management."

Mr. Allen said Bata has a three-year GIC investment cycle that aims to duplicate the benefits employees would have received under the terminated defined benefit plan.

"The GICs are a much more manageable issue to agonize over," than were the reports from the defined benefit plan's outside investment managers and the consultant that monitored performance. "Those reports tended to overwhelm us with numbers every month," he said.

Although the GIC portfolio's 11% rate of return is not as great as the 17% average annual return during the last 10 years the defined benefit plan was in place, Mr. Allen says the trade-off is appropriate.

"While the return is not as great, it's assured," he said. "We've eliminated market risk . . . and attempted to allow for inflation risk. We've avoided those risks and have had to give up some return . . . but we have peace of mind."

When First National Bank & Trust Co., Oklahoma City, had a defined benefit plan, its asset mix was 30% equity, 60% fixed income and 10% alternative investments — primarily real estate, with some limited partnerships and some oil and gas investments, said Bud Burch, vice president and head of employee benefits.

But after it terminated its pension plan in

Continued on page 47

Trend is more plans, less growth

By Chuck Paustian

The number of defined contribution plans has almost doubled in the past five years while the annual growth rate of those plans has slowed dramatically.

According to data compiled by the Employee Benefit Research Institute, Washington, there were about 562,000 defined contribution plans as of June 30, an increase of 8% since the beginning of 1980.

The assets in defined contribution plans grew 79% between 1980 and 1984.

Statistics compiled by the Department of Labor show there was $167.6 billion in defined contribution plans at the end of 1980. The department estimated there was $192.3 billion in 1981, $221.2 billion in 1982 and $250.2 billion in 1983.

In his book, "Pensions, Economics and Public Policy," Richard Ippolito, director of policy and research at the Department of Labor, estimated there was $300 billion in defined contribution plans in 1984.

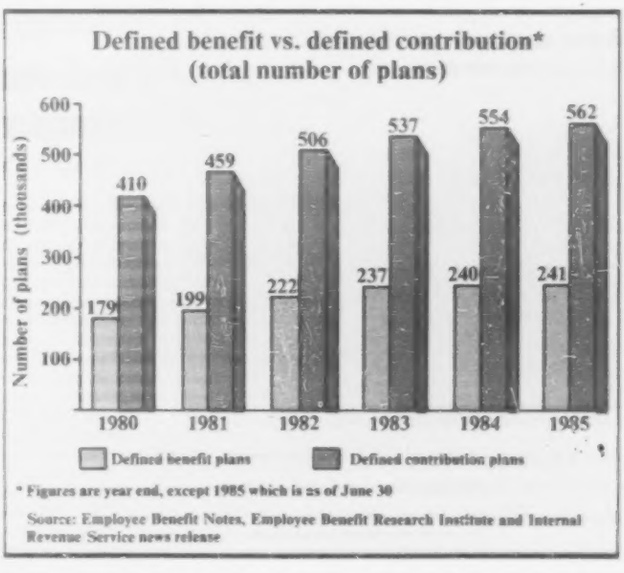
In addition, the number of defined contribution plans still exceeds the number of defined benefit plans by roughly 2-to-1 (see chart).

However, the statistics, based on the number of qualification letters and termination applications received by the Internal Revenue Service, Washington, indicate a decline in the annual growth rates of both defined contribution plans and defined benefit plans.

The decline in growth of defined contribution plans began in 1979, when the number of defined contribution plans increased by 6.9%, after a rate of 11.5% the previous year. In comparison, defined benefit plans grew by 13.1% in 1979, an increase from the previous year's 5.7% growth rate.

The slide in defined contribution plan growth was halted temporarily in 1981 when defined contribu-

Continued on page 52



Employers switch as rules change

By Joel Chernoff

When the compensation manager for an 8,000-employee Silicon Valley electronics firm left a conference on possible tax law changes affecting employee benefits, he was stunned.

The official knew Congress was contemplating cutting back on 401(k) salary reduction plans, but he had not realized how extensive changes affecting defined benefit plans were, including sweeping revisions of non-discrimination rules and distribution rules.

(The non-discrimination proposals, for example, could cost companies a hefty sum in making benefits equal for different corporate units, although the administration has promised to develop safe harbors.)

Based on what he heard, the manager said he would discuss outright elimination of his company's defined benefit plans.

This is not the first time employers have looked toward defined contribution plans as the salvation for providing retirement income for their employees.

After the Employee Retirement Income Security Act was enacted in 1974, many employers fled their defined benefit plans. Other tax law changes in the past four years and those now being considered might spur more such actions, some experts said.

For larger companies, changes in the economy, the younger nature of the work force and government regulations have played powerful roles in pushing employers toward defined contribution plans, although defined benefit plans are still predominant.

For smaller firms, however, the administrative burden of maintaining defined benefit plans has become too costly, experts said. In response, the companies are adopting defined contribution plans as their sole retirement vehicle.

For all companies, defined contribution plans are far easier to understand and offer more predictable cost control.

Also, in the event of financial difficulty, a company's potential liability to the Pension Benefit Guaranty Corp. might scare away yet more employers from starting

Continued on page 51

More plans . . .

Continued from page 37

tion plans grew 11.9%, the highest growth rate during the 10-year period ended Dec. 31, 1984. During 1981, defined benefit plans grew by 10.7%.

However, the growth of defined contribution plans and defined benefit plans has continued to fall since then, with growth rates of 10.2% and 11.7% in 1982; 6.1% and 6.7% in 1983; and 3.2% and 1.5% in 1984, respectively.

Harry Gross, partner of the defined contribution division at Kwasha Lipton, Fort Lee, N.J., said the decline in the growth rate might be deceptive.

"If we define the growth of defined contribution plans to include the expansion and enhancement of defined contribution plans, then the growth rate has nowhere near stabilized," said Mr. Gross.

One reason for the decline in the growth rate may be the confusion caused by the threat of changes in federal legislation governing the defined contribution plans.

The Reagan administration's tax-reform proposal could have a serious impact on 401(k) plans, the most popular variety of defined contribution plans.

Gary A. Pines, an actuary with Towers, Perrin, Forster & Crosby, Chicago, said it is impossible to plan an income accumulation replacement program with possible legislative changes hanging over one's head.

"So, you tend to wait. If you wait, you tend to never put (the plan) in," said Mr. Pines.

If the appeal of the 401(k) plans was diminished, there would be an even greater decline in the growth of defined contribution plans.

"The growth of the defined contribution plans in the last two years was spurred greatly by the 401(k) plans," said Mr. Gross.

"If the proposals were to have their way, they would greatly change defined contribution plans and would change them to make them very retirement oriented."

The declining growth rate may also be attributed to the fact that those companies that intended to start defined contribution plans already have done so.

"I have no doubt that there is only so far you can go," said Mr. Gross.

The three years from 1981 and 1983 was the main period for new plan growth, according to Mr. Gross. He believes the number of defined contribution plans is still growing among larger corporations.

For example, NCR Corp., which employs 62,000, added three defined contribution plans — a payroll-based stock option plan, profit-sharing plan and a 401(k) plan — while changing its existing defined benefit plan from final-pay to career-average (*Pensions & Investment Age*, Jan. 7).

"We did not feel that the final-pay pension plan was really understood by employees and valued by them," said James E. McElwain, vice president-personnel resources of the Dayton, Ohio, company. The current system is appreciated more by employees and is more flexible for the company, he said.

The change in the defined benefit plan allowed NCR to add the other plans while keeping its costs roughly the same, Mr. McElwain said. The new combination allows employees to receive benefits equal to or slightly greater than they would have received under the final-pay defined benefit plan, he said.

The 401(k) plan is the only one in which participation is optional, but about 70% of eligible employees participate, Mr. McElwain said. Their average contribution is 4.3% of pay. Both figures are close to NCR's projections, he said.

Overall, the change in the mix of retirement plans appears to be working out well, he said. "We're initially very, very pleased with it," he said. "It was well-received by employees."

Mr. Pines agreed the larger corporations are adding defined contribution plans, but defined benefit plans are still dominant.

"In the larger plan, larger corporation area, most of them have defined benefit plans," said Mr. Pines.

"Those that have gotten out of the defined benefit area have done it for financial reasons."

Both Pan American World Airways Inc., New York, and The LTV Corp., Dallas, froze their defined benefit plans and established defined contribution plans to keep unfunded liabilities from growing and eventually save on pension expense (*P&I Age*, Sept. 16).

The attractions of the defined contribution plans vary slightly depending on which plan is implemented. General attractions include increased employee interest in the company, ease of communication with the employees and the fixed cost.

Although the cost of defined contribution plans is fixed, whether the overall cost is less than the cost of a defined benefit plan varies.

With a defined benefit plan, "the employer bears the investment risk," said Mr. Pines. "If the employer can earn enough money from gains on investment returns, the costs can be low."

Mr. Pines added the premium charged by the Pension Benefit Guaranty Corp., Washington, which insures a portion of the benefits guaranteed under a defined benefit plan, could make a defined benefit plan more costly.

Reliable Stores Inc., Columbia, Md., switched to a leveraged employee stock ownership plan after terminating its defined benefit plan and recapturing $9.6 million.

"It can't help but be a cost-saving measure," said Lawrence M. Rivitz, director of human resources at Reliable Stores. "It will certainly affect the rate at which you borrow."

Mr. Rivitz said the plan helps to motivate the company's employees. "We have used it, and will continue to use it, as a tool to focus people's attention in the business," he said.

The move also benefits the employees because the new plan covers 1,500 employees, whereas the old defined benefit plan covered only 1,200.

The switch to an employee stock ownership plan aided American Sterilizer Co., Erie, Pa., when it took itself private through a leveraged buy-out.

"The excess assets in the (terminated) defined benefit plan could be used to help buy down the debt," said Robert Becker, director of corporate employee benefits.

"In the buy-out, we felt it was better for the employees to be an intregal part of the company."

Kwasha Lipton's Mr. Gross said once the regulatory confusion over defined contribution plans has been eliminated, another surge in the rate of growth for these plans should occur, although it probably will not reach the heights of early '80s.

"The defined contribution area is most definitely still growing," he said. ■

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Real Estate Open-end funds

1-year returns

	%
Aetna Life & Cas., Conn.	9.3
Bank of America, Calif.	2.7
Bank One Trust, Columbus	14.3
Bankers Life, Iowa	9.9
Canada Life Assurance	15.5
Chase Manhattan, N.Y.	14.9
CIGNA Corp., Conn.	13.7
Citicorp, N.Y.	17.6
Consumer Price Index	3.8
Crocker National, Calif.	8.1
Equitable Life, N.Y.	12.5
First of Boston	12.2
First of Chicago	10.8
First of Minneapolis	12.5
Goldman, Sachs	14.4
Interfirst Bank, Dallas	12.3
John Hancock, Mass.	7.7
Lloyds Bank, Calif.	8.5
Massachusetts Mutual	10.8
Metropolitan Life, N.Y.	19.0
Metropolitan Life (Tower Fund)	10.6
Morgan Guaranty, N.Y.	16.7
Mutual Benefit Life, N.J.	21.0
NCNB National Bank, N.C.	17.0
New England Mutual, Mass.	19.1
New York Life, N.Y. (3)	9.2
Phoenix Mutual, Conn.	18.7
Prudential (Morisa), N.J.	21.7
Prudential (Primor), N.J.	18.8
Prudential (PRISA), N.J.	10.9
Republic Natl., Dallas	12.0
Seafirst Bank, Wash.	10.3
Sun Bank, Fla.	11.4
Third Natl., Nashville	8.2
Travelers, Conn.	7.7
United Virginia Bank	11.1
Wachovia Bank, N.C.	13.2
Wells Fargo Rlty. Adv., Calif.	10.3

3-year returns

	%
Aetna Life & Cas., Conn.	11.3
Bank of America, Calif.	8.4
Bank One Trust, Columbus	11.2
Bankers Life, Iowa	11.3
Canada Life Assurance	12.9
Chase Manhattan, N.Y.	13.4
CIGNA Corp., Conn.	15.0
Citicorp, N.Y.	10.7
Consumer Price Index	3.4
Crocker National, Calif.	9.7
Equitable Life, N.Y.	13.3
First of Boston	13.1
First of Chicago	12.5
First of Minneapolis	14.9
Interfirst Bank, Dallas	13.3
John Hancock, Mass.	10.2
Massachusetts Mutual	10.7
Metropolitan Life, N.Y.	16.7
Metropolitan Life (Tower Fund)	15.1
Morgan Guaranty, N.Y.	17.9
Mutual Benefit Life, N.J.	17.2
NCNB Natl. Bank, N.C.	17.7
New England Mutual, Mass.	23.1
New York Life Insurance (3)	5.5
Phoenix Mutual, Conn.	16.5
Prudential (Morisa), N.J.	17.3
Prudential (Primor), N.J.	16.6
Prudential (PRISA), N.J.	10.5
Republic Natl., Dallas	11.0
Seafirst Bank, Wash.	9.8
Sun Bank, Fla.	11.6
Third Natl., Nashville	9.3
Travelers, Conn.	8.6
United Virginia Bank	11.9
Wachovia Bank, N.C.	10.6
Wells Fargo Rlty. Adv., Calif.	9.2

5-year returns

	%
Aetna Life & Cas., Conn.	13.3
Bank of America, Calif.	10.8
Bank One Trust, Columbus	14.6
Consumer Price Index	5.3
Crocker National, Calif.	10.8
Equitable Life, N.Y.	13.9
First of Boston	13.4
First of Chicago	13.7
Interfirst Bank, Dallas	13.3
John Hancock, Mass.	11.5
Metropolitan Life, N.Y.	16.2
Morgan Guaranty, N.Y.	17.6
NCNB Natl. Bank, N.C.	16.4
Prudential (PRISA), N.J.	12.2
Travelers, Conn.	11.3
Wachovia Bank, N.C.	14.0
Wells Fargo Rlty. Adv., Calif.	12.1

10-year returns

	%
Consumer Price Index	7.2
Equitable Life, N.Y.	12.9
First of Chicago	11.9
Metropolitan Life, N.Y.	13.1
Morgan Guaranty, N.Y.	18.3
Prudential (PRISA), N.J.	14.7
Wachovia Bank, N.C.	14.6
Wells Fargo Rlty. Adv., Calif.	12.6

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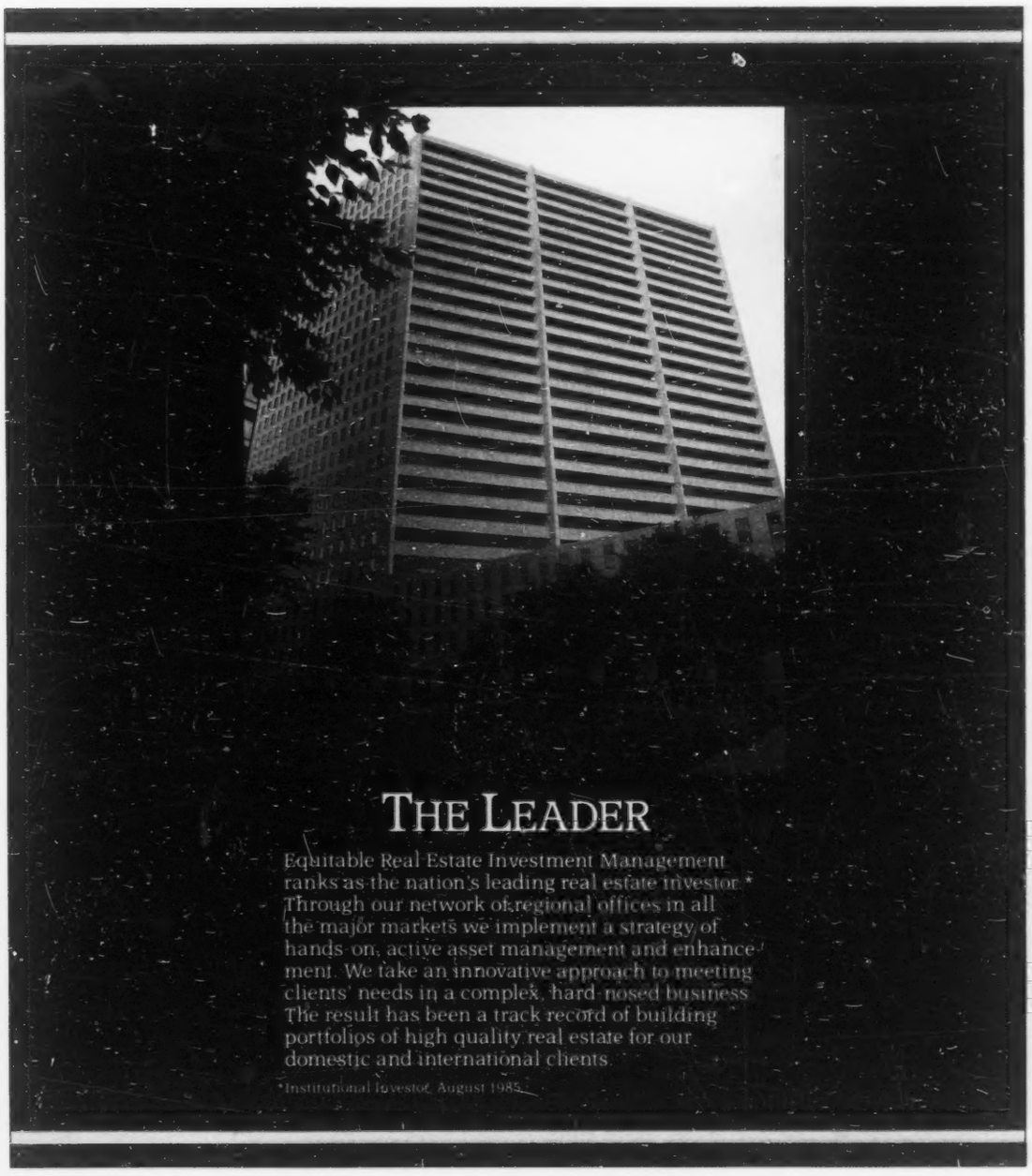

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*Institutional Investor, August 1985

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Wrap-up

REITs file for ipos

Some 33 planned real estate investment trusts have filed registrations so far this year for initial public offerings with the Securities and Exchange Commission, according to the National Association of Real Estate Investment Trust Inc.

Officials for 12 of the new REITs said they plan to offer a series of REITs in the coming years. The association said 1970 was a record year for the formation of REITs when 42 were formed.

Conference draws 50

More than 50 pension fund officers had planned to attend the Utah State Retirement Board's fourth annual conference on pension fund real estate investment, according to Clemens J. Laufenberg, conference manager. The conference, which focuses on current real estate investment issues, runs Nov. 11 to 13 in San Francisco.

Industrial yields high

Industrial properties are generally offering some of the highest initial yields for institutional-quality existing properties available on an all-cash basis and leased at current market rents, according to the "Property Report" issued by Richard Ellis Inc., Chicago.

The initial yields for industrial properties are between 8.5% and 9.5%. The initial yields for office properties are between 7.75% and 8.75%, and the yields for retail properties are between 7.5% and 8.25%, the report said.

Boston Co. establishes new division

BOSTON — The Boston Co. has launched a structured investment products division that provides pension and endowment funds with stock and bond index funds, active core equity management, dedicated or immunized bond products and asset allocation strategies.

The SIP division began in July, according to Richard A. Crowell, division manager. It now oversees assets of roughly $500 million for 20 pension fund customers, he added.

Pension clients with accounts being managed by the SIP division include: AGRI Industries, Des Moines, Iowa; Agway Inc., Syracuse, N.Y.; Emery Air Freight Corp., Wilton, Conn.; PPG Industries Inc., Pittsburgh; and Raytheon Co., Lexington, Mass.

"We expect more interest in bond index products," said Mr. Crowell.

The reasoning behind that interest is the same that investors apply to the use of equity index products, he said. "For example, significantly more than half of all bond managers are unable to beat the Shearson Lehman" Government/Corporate bond index.

"Further, the high reliability and low cost of these vehicles and strategies has made them an ideal complement to active management," he said.

A commingled equity index fund is available to pension funds in the SIP division also. It is a Wilshire 5000 index fund, managed by the Boston Co., he said. That fund totals roughly $200 million in pension fund assets.

A second Wilshire 5000 equity vehicle will be introduced at year end for foundations, said Mr. Crowell.

The Boston Co. manages about $4 billion in employee benefit assets. ■

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San Bernardino . . .

Continued from page 59

Yankee declined to state how the price varies on the building in relation to income, but said, "The higher the leases are, the higher the income stream, and the more we are going to have to pay for the building."

While the building has relatively small floor space, Christopher J.B. Ellis, a vice president with Richard Ellis Inc., said the smaller floors (2,700 square feet each) can be an advantage.

A major new building might have 20,000 square feet to 25,000 square feet per floor, Mr. Ellis noted.

However, unless the tenant is a major company, it might not want all that space, and therefore would share a floor with another tenant.

But, said Mr. Ellis, some smaller businesses want to lease an entire floor so they have "their own identity" in the building and can personalize the lobby of the floor they lease.

Regardless of floor plans or sizes, the office vacancy rate has been increasing in downtown San Francisco, to 11.8% at the end of June.

As of the same date, the Coldwell Banker national office vacancy index for major domestic downtown areas was reporting 16.1%.

The vacancy rate for suburban San Francisco was 18.2%, closer to the national suburban vacancy rate of 19.7%.

Mr. Ellis said there had been concern that many major companies would be moving out of downtown San Francisco to the newer buildings of suburban East Bay areas.

However, he said, a couple of major companies decided not to leave the downtown area, improving the office vacancy outlook.

At the same time, the San Francisco city supervisors have approved a downtown plan that will mean reduced floor space to land ratios — the arithmetic relationship of total square footage of the building to total square footage of the land on which the building is built — which could mean less available office space in the future. ■

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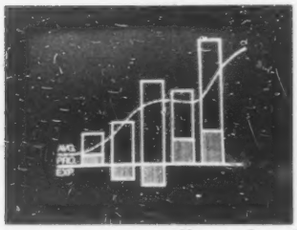

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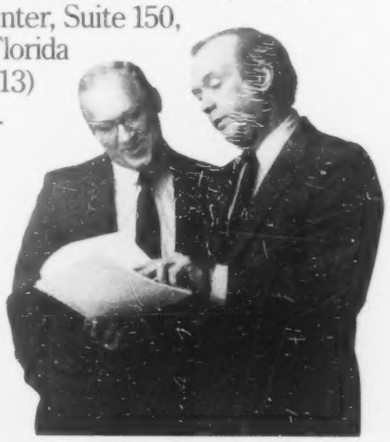

C&S

Real Estate Closed-end funds

1-year returns

	%
Coldwell Banker (II)	14.1
Coldwell Banker (III)	8.9
Coldwell Banker (IV)	9.7
Coldwell Banker (V)	21.7
Coldwell Banker (VI)	9.1
Coldwell Banker (VII)	11.9
Consumer Price Index	**3.8**
JMB Institutional (I)	17.8
JMB Institutional (II)	16.9
John Hancock (SERA 1)	23.8
LaSalle Advisors	18.8
Metropolitan Life (I)	9.8
RREEF (Mid-America I)	8.4
RREEF (Mid-America II)	11.8
RREEF (Fund I)	7.0
RREEF (Fund II	11.9
RREEF (Fund III)	10.9
RREEF (Fund IV)	9.0
RREEF (USA I)	10.7
RREEF (USA II)	7.8
Sarofim Trust Co. (SIRF P-I)	24.5
State Street Bank (I)	21.0
State Street Bank (II)	11.0

3-year returns

	%
Coldwell Banker (Ii)	15.4
Coldwell Banker (III)	10.4
Coldwell Banker (IV)	11.9
Coldwell Banker (V)	15.7
Coldwell Banker (VI)	10.9
Consumer Price Index	**3.4**
JMB Institutional (I)	18.6
LaSalle Advisors	17.7
RREEF (Mid-America I)	9.9
RREEF (Mid-America II)	14.4
RREEF (Fund I)	10.9
RREEF (Fund II)	12.5
RREEF (Fund III)	12.8
RREEF (Fund iV)	9.0
RREEF (USA I)	12.2
RREEF (USA II)	13.1

5-year returns

	%
Coldwell Banker (II)	21.0
Coldwell Banker (III)	12.0
Coldwell Banker (IV)	14.8
Consumer Price Index	**5.3**
RREEF (Fund I)	14.7
RREEF (Fund II)	14.2

10-year returns

	%
Coldwell Banker (II)	21.0
Consumer Price Index	**7.2**

Funds a step closer to incentive fees

By Joel Chernoff and Marci Baker

Pension fund executives may be eager to implement new performance-based fee schedules, but their enthusiasm might be dampened by the Department of Labor.

While the Securities and Exchange Commission has approved use of performance-based fees, the Labor Department seems none too eager to provide general guidance on their use.

Rather, guidance is likely to come on a case-by-case basis, and money managers will have to find out whether their particular arrangements will survive departmental scrutiny.

"The general problem that a lot of these situations face is that they confer on the fiduciary the ability to determine their own level of compensation, and that's very difficult to reconcile under ERISA," said Alan Lebowitz, deputy administrator of the Labor Department's pension office.

However, some pension executives believe it is only a question of time before fee schedules are restructured. International Business Machines Corp. may be among the first to establish an incentive-based fee program.

Robert Shultz, director-U.S. retirement funds, said he might reestablish a discussion on incentive

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Late news

Asset disposition set

MORRIS TOWNSHIP, N.J. — Complex actuarial calculations will be required to determine the disposition of $6 billion in employee benefit assets following the spinoff of 28 business units by Allied-Signal Inc., said Edward T. Tokar Jr.,

Continued on page 70

Pensions & Investment Age

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The newspaper of corporate and institutional investing • $4.00 an issue • $75 a year • November 25, 1985

Investors applaud firm's premiere

3-year-old New World Pictures, which gave the moviegoing public "Godzilla 1985," gave the investing public a simultaneous offering of common stock and subordinated notes. Investors greeted it with strong demand. Story on page 31.

Pension execs, managers face huge insurance hikes

By Steve Hemmerick and Trudy Ring

Liability insurance premiums are skyrocketing for pension fund executives and money managers, victims of a nationwide liability insurance crisis.

Fiduciary liability insurance, held by an estimated 80% to 90% of corporate and jointly trusteed pension plan sponsors and many public plans, now costs 50% to 500% more than it did during the first half of 1985, insurance brokers report.

The cost of errors and omissions insurance, a kind of malpractice insurance for money managers, is up generally 200%, but increases can go as high as 2,000%, according to underwriters and insurance brokers. About 55% of investment managers, including mutual fund managers, carry such policies, said Bill Baker, an account executive with Tongue, Brooks & Co., a Baltimore insurance brokerage firm.

Costs for both types of insurance are determined on a policy-by-policy basis, dependent on such factors as claims experience, underwriting exposure, track record (of money managers), deductibles and coverage limits.

Increases in the premiums may make errors and omissions insurance less attractive to money managers, but pension plan executives likely will continue to see fiduciary liability insurance as a necessary cost of doing business, experts in the field said.

"The cost of doing business has gone up, but we still find that what we are purchasing is not out of line," said Dennis Hoffman, director of insurance operations for Deere & Co., Moline, Ill.

"Most people that do buy (fiduciary liability insurance) now have made a conscious decision to buy it and will stay with it," said Ron Boggs, a consultant in the Chicago office of The Wyatt Co., which surveys corporations on fiduciary liability and directors' and officers' insurance.

The rising cost of both fiduciary liability and errors and omissions insurance is part of a trend throughout the insurance industry.

Rates on all types of professional liability insurance are going up because of claims against corporate executives, not necessarily in the pension investment area.

In a major suit outside the pension area earlier this year, Bank of America, San Francisco, sued six officers in connection with a $95 million loss triggered by the bank's involvement with allegedly fraudulent mortgage-backed securities. At the same time, the bank sued its two directors' and officers' insurers, who then canceled the bank's coverage.

Also, lawsuits charging breaches of fiduciary duty have increased, said Albert Salvatico, a managing director of Marsh & McLennan Cos., the New York-based insurance broker. These suits often are triggered by underfunding of pension plans or recovery of assets by terminating overfunded plans, he said.

For instance, two pensioners already have sued Wheeling-Pittsburgh Steel Corp., Pittsburgh, seeking to hold company officials, as well as the United Steel-

Continued on page 66

Mead cuts fixed, hedges equities

By Richard J. Gillespie

DAYTON, Ohio — Mead Corp., under the direction of a new pension fund executive, has gotten out of the fixed-income markets and is boosting its equity holdings.

The common stock allocation for the $360 million pension fund will be boosted to 75% from 60%, with the portfolios being protected by a portfolio insurance program using futures, according to Brian Ross, the new manager-pensions and investments.

The remainder of the asset mix will remain 15% real estate equity, 5% convertibles and 5% cash. Previously, the fund had 15% in fixed-income investments.

The move is being made to eliminate corporate contributions to the overfunded plan. The present value of plan liabilities as of Jan. 1 was $265 million.

"Our goal is to have zero pension costs and for the fund itself to fund the plans," using the receipts of stock dividends and sales of stock holdings, said Mr. Ross. He recently joined Mead Corp.'s treasury group from the University of Miami, where he taught money and banking for the economics department.

Last July, former pension fund executive Shirley Shea De Jarnette swapped jobs with Gerald Bialka, an assistant treasurer with responsibility for corporate finance and international treasury operations.

In turn, Mr. Bialka brought in Mr. Ross, and together they came up with a plan to ditch the fund's $60 million fixed-income commitment — held in a J.P. Morgan Investment Management Inc.'s commingled fund — in favor of a hedged equity index fund.

Recently, Wells Fargo Investment Advisors in San Francisco was given $40 million to run an index fund tailored to track the Standard & Poor's 500 stock

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Photo by Michael Marcotte

Ronald Gold, left, Richard Ennis, center, and James Knupp, principals of the Chicago consulting firm Ennis, Knupp & Gold, discuss the changing needs of pension fund executives in Pensions & Investment Age*'s annual directory of investment consultants, beginning on page 55.*

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Responsibility on IPGs at issue

Teamwork halts amendment

By Joel Chernoff

WASHINGTON — Two unlikely allies — U S WEST Inc. and organized labor — apparently have helped stop insurance industry efforts to avoid fiduciary responsibility for immediate participation guarantee contracts.

At issue was an amendment to Congress' budget reconciliation bill that could have affected separate lawsuits brought by U S WEST of Englewood, Colo., and two Taft-Hartley pension funds against two insurance carriers from which they had purchased IPGs.

Officials from U S WEST and the AFL-CIO's building trades department mounted serious opposition to the amendment, lobbying senators heavily and noting the cases affect constituents in 25 states.

Sens. Don Nickles, R-Okla., and Christopher Dodd, D-Conn., had presented the industry proposal to Senate members for reaction, but would not push the measure unless it were considered "non-controversial," sources added.

Sen. Howard Metzenbaum, D-Ohio, squelched the proposal as it was being circulated.

The complex set of issues boils down to whether an insurance company is considered a fiduciary under the Employee Retirement Income Security Act with regard to assets underlying certain contracts that are commingled in the insurer's general account.

Generally, ERISA exempted such assets from being considered plan assets where the insurance contract is deemed a "guaranteed benefit policy."

In such cases, the insurer avoids the burden of being a plan fiduciary with respect to insurance company general account assets. (An insurer is considered a fiduciary with respect to separate accounts for pension plans.)

Some pension fund executives, including those from U S WEST and the unions, argue they have been cheated out of assets because of "hidden charges" imposed when the funds terminated their contracts and sought repayment in a lump sum, rather than during a period of several years.

Some seek to have the insurance companies considered plan fiduciaries under ERISA.

Conversely, insurance industry experts maintain confusion regarding the legal status of these contracts may affect billions of dollars contained in insurance company general accounts. ERISA's fiduciary obligations would place impossible and contradictory demands upon their ability to protect all policyholders, they contend.

The insurance industry still may attempt to add clarifying wording

Continued on page 65

In the case of "Intermarket," (an investment of the Illinois Venture Fund) institutional investors' interest in and use of financial futures and options provide the catalyst for growth.

— Rodney Goldstein, Frontenac Venture general partner

Some funds high on low-tech deals

By Trudy Ring

Some pension funds have taken the low road in venture capital investments — low technology, that is.

Pension funds' recent investments outside the high-technology sector include a rural hospital management company, an operator of psychiatric clinics, a regional airline, an operator of funeral homes and a financial magazine.

"A business enterprise is a business enterprise, and you can make just as high a return on some mundane concepts as in some totally new industries," said Carl Liebscher, director of investments for Deere & Co., Moline, Ill. Deere's $1.8 billion pension fund has invested in several venture partnerships that have made investments both in and out of the high-technology sector.

The initial public offering market has been hospitable to non-technology issues, said Edwin Goodman, a general partner of the $32 million Hambro International Venture Fund, which handles about $12 million from pension plans.

The 3-year-old fund's first portfolio company to go public is National Healthcare Inc., Dothan, Ala., which manages rural hospitals. The company expects to raise $60 million in its IPO.

The Hambro fund put $1.5 million into the health care company 18 months ago. With the public offering, this will have a market value of $5 million to $6 million, Mr. Goodman said. If investors don't sell immediately, they could stand to gain more, he said.

U.S. pension fund investors in the Hambro fund were the YMCA Retirement Fund, New York; United Systems Master Trust, Kansas City, Mo.; and another that invested through Manufacturers Hanover Investment Corp., New York. Also, eight British pension funds put money into the Hambro partnership.

The partnership invested in both high-tech and other types of businesses, Mr. Goodman said. The investment in National Healthcare was attractive because of developments in that industry, such as new Medicare policies and demands for cost control, he said.

"Where there's realignment in an industry, it represents opportunity," Mr. Goodman said. "This investment seemed to have a fairly moderate risk with high potential."

Another non-technology investment by the fund was in Rivendell of America Inc., Memphis, Tenn., a builder and operator of residential psychiatric clinics. The company is making progress, having opened its first clinic and completed construction of its second, he said.

Investments by Chicago-based Golder, Thoma & Cressey's two venture capital funds have been both in and out of high-tech, said Stanley C. Golder, general partner. Popularity of "low-tech" investments doesn't mean high-tech is out of favor, he said.

"I think there's always going to be opportunity in high tech to a degree, but people have to be more selective in the types of companies

Continued on page 67

Charity spurs big investment in Gary Bland

By Steve Hemmerick

SEATTLE — Gary Bland, manager of trust investments for Boeing Co., is an expensive date.

One Seattle businesswoman spent $1,350 earlier this month to obtain a date with the pension executive, and she wasn't even seeking to manage Boeing pension assets.

Mr. Bland was among 22 Seattle-area bachelors, including television newsmen and professional athletes, who put themselves up for bid at a March of Dimes fund-raiser here that netted about $20,000.

Despite being the oldest, shortest and grayest of the bachelors, Mr. Bland attracted the highest bid.

Judy Moore, a vice president of marketing for Budget Rent-a-Car, wrote the $1,350 check for a date with Mr. Bland.

Prior to their date, Ms. Moore said she picked Mr. Bland "based strictly on personality he conveyed. He looked intelligent and looked like he enjoyed life." She also reportedly said she needed a tax write-off.

Part of the reason the bidding was steep for Mr. Bland, guessed Jayne Manlowe, who helped put the charity affair together, was Mr. Bland is "real attractive, with salt-and-pepper hair and real blue eyes. He is a little small, 5 feet 9 inches. One of the other bachelors is 6 feet, 10 inches tall from the (Seattle) SuperSonics (professional basketball team). You can imagine what they looked like standing together."

Mr. Bland also is known to "have a lot of money. I hate to be that blunt, but it is a fact of life, you know," Ms. Manlowe said.

Each man was offered as a "package" that included plans for the evening's entertainment.

Mr. Bland offered to take his high bidder on a "limo-chauffeured evening" for dinner in the Georgian Room of the Four Seasons Hotel in Seattle, followed by dancing and a night cap.

The most common date offered, said Ms. Manlowe, was dinner and a play or show, but one date included a flight to San Francisco with a champagne breakfast.

That Mr. Bland attracted the highest bid was made known at a real estate conference in San Francisco. Mr. Bland, who was in attendance at the conference, blushed.

He jokingly said he agreed to participate in the March of Dimes fund-raiser because he thought he "couldn't otherwise get a date."

One real estate marketing man for an insurance company said his firm held a pool in the office for the date with Mr. Bland, but the bid for the date was "$1,348 short" of the winning one. ■

Few managers are sought for rosters

By Rose Darby

Pension funds' demand for additional money managers has slowed.

Some pension fund executives have become less interested in adding to what already might be an overcrowded slate of active money managers, said plan executives and consultants interviewed by *Pensions & Investment Age*.

Observers said the slackening demand is the result of:

- a more sophisticated approach by pension executives;
- the high cost of multiple manager arrangements;
- the feeling by some that they have enough value-oriented managers;
- relative satisfaction with the lineup because the markets have provided good returns; and
- increasing interest in passive management, especially on the fixed-income side.

Decline in the demand for active managers also was attributed to the diluted benefits of increasingly undifferentiated investment styles.

"There seems to be much more concern by large plan sponsors regarding how many money managers they have," said Sandy Lincoln, director of investment services at A.S. Hansen Inc., a pension consulting firm in Lake Bluff, Ill.

"We're seeing a lot less interest in adding more active managers," he said.

The cause of that trend is related to costs and benefits, he said.

Pension executives are asking, "What are we getting for what we're paying?"

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The Market Surge

Managers were fully invested and waiting

Proper positioning paid off for pension plans

By Alan Krauss

Pension funds apparently were well positioned to benefit from an explosion in the equity markets that saw the Dow Jones industrial average rise 10% in eight weeks to record highs before settling around 1,430 in mid-November.

Most equity money managers surveyed by *Pensions & Investment Age* said they had reduced their cash positions and were fully invested in the equity markets well before the run-up began in September.

That equity managers overall seemed virtually fully invested left no firm explanation for the market surge. While some observers discounted money managers' claims of being fully invested before the market rally, others said a number of factors could explain the rise. These include:

• Commitments to the market by mutual funds, which generally had higher cash positions than pension funds.

• Commitments by pension fund managers of some fixed-income assets to the equity markets.

• Purchases by foreign investors, particularly Japanese.

• Index futures-related transactions.

• The reinvestment of cash by former shareholders of companies that have been acquired in takeovers or that have bought back their stock.

• The fact that nobody seemed to be selling stock.

Statistics from INDATA, a Southport, Conn., investment analysis firm, show only a slight drop in the cash position of equity managers when the market took off. Cash positions fell to 7% as of Nov. 15 from 7.4% at the beginning of the month and 7.1% at the end of the third quarter.

An INDATA spokesman, who called the drop "infinitesimal," said the figures suggest equity managers did not reduce their cash positions to get in on the market rally. The small decline could be accounted for by the increased market value of the total portfolio, he said.

"That would imply that it was not institutions that were fueling the buying," he said.

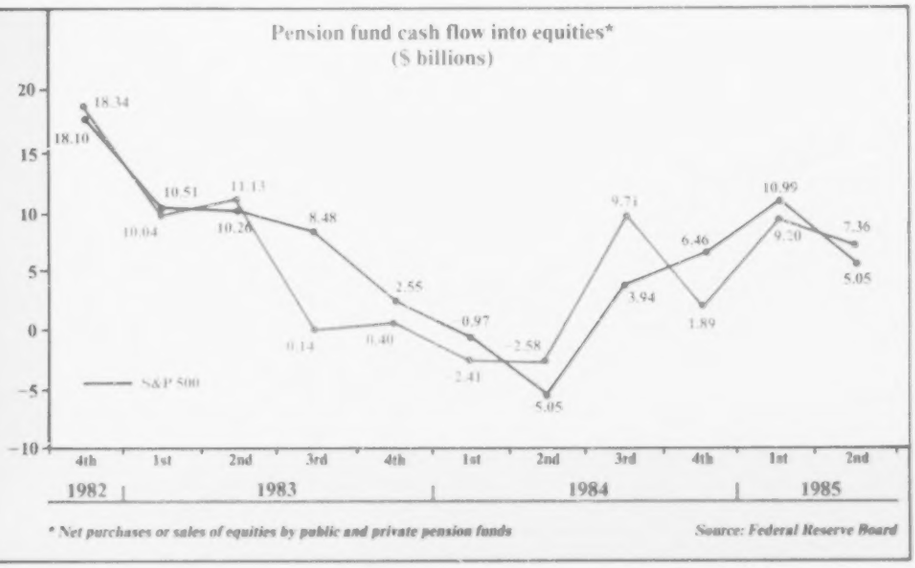
Statistics compiled by Merrill Lynch Consulting Group agreed with the INDATA figures; they showed balanced pension accounts also had relatively low cash positions as of the end of September, the most recent figures available.

Pension funds had an average of 9.2% cash in balanced accounts for the quarter ended Sept. 30, according to Merrill Lynch, compared with an average 10.8% cash position for the five years.

But Edward Yardeni, chief economist at Prudential Bache Securities Inc., New York, discounted managers' claims of being fully invested throughout the market surge. Mr. Yardeni noted several of his firm's brokerage accounts built up substantial cash positions in the early stages of the rally.

Money managers interviewed by *P&I Age* — be they large or small, including market timers and excluding only a few contrarians — insisted they were where they belonged.

Continued on page 70



Funds return to equity market

By Richard J. Gillespie

Corporate pension funds are buying equities after an extended dry spell in which they were net sellers of stocks, Federal Reserve Board statistics show.

According to the Federal Reserve Board's Z-1 report on flow of funds into the marketplace, private pension plans seem to have reversed a trend in which the stock market increasingly was abandoned in favor of fixed-income management techniques like dedication and immunization.

Figures taken from the Federal Reserve report and published by Prudential-Bache Securities Inc. show that in the first half of 1985, private pension plans increased stock market holdings by $4.23 billion after making net sales of $2.6 billion in equities during 1984.

"The figures show there was still a bias to the fixed-income side, yet they have been buying equities, and that is significant," said a Pru-Bache spokeswoman.

More recently, activity in immunization and dedication seems to have trailed off, according to Paul Berg, president of Berg Fiduciary Consultants Inc., Port Chester, N.Y. (Federal Reserve statistics for the third quarter are not yet available.)

Continued on page 70

Readers asked to vote on top stories of '85

Corporate and institutional issues grabbed headlines nationwide in 1985.

Which of those trends and news events were the most significant? The editors of *Pensions & Investment Age* put the question to the movers and shakers in the capital markets — our readers.

Below is a list of major stories reported by *P&I Age* during 1985. Please look over the list, then choose the five you believe were the most important. Rank order your choices from 1 to 5 (with 1 being the most significant or important), and place the numbers in the boxes beside your choices on our list.

☐ Institutional investors divest of $738 million in South Africa-related securities, with another $8 billion planned for divestment within the next five years.

☐ The Pension Benefit Guaranty Corp. negotiates a collateralized funding waiver for The LTV Corp. as the agency becomes more militant and high-profile.

☐ Salomon Brothers Inc. moves into the program trading area and away from block trading.

☐ Some pension funds sue insurers over immediate participation guarantee contracts, while others try to withdraw from IPGs.

☐ E.F. Hutton & Co.'s chairman pleads the company guilty to charges of wire and mail fraud stemming from the company's cash management procedures.

☐ Troubled companies with huge unfunded liabilities freeze their defined benefit plans and set up defined contribution plans to keep their unfunded liabilities from growing even larger.

☐ Several companies set up pension parachutes to prevent surplus pension assets from helping to finance a hostile takeover.

☐ The amount of excess assets reverting to employers from pending and completed terminations of overfunded pension plans skyrockets to $9.45 billion.

☐ NBC airs its white paper on pension funds, "The Biggest Lump of Money in the World," amid scorching criticism from members of the pension community.

☐ As the PBGC pushes for an increase in its single-employer premium, Allis-Chalmers Corp. and Wheeling-Pittsburgh Steel Corp. dump unfunded liabilities totaling at least $600 million on the agency.

☐ United Air Line's surplus assets from terminated pension plans become integral to financing the airline's aggressive corporate expansion.

☐ General Motors Corp. issues separate classes of common stock to help finance its acquisitions of Electronic Data Systems and Hughes Aircraft Co.

☐ Hybrid plans emerge, combining the advantages of both defined benefit and defined contribution plans.

☐ Municipalities begin to issue tax-exempt bonds to buy annuities to pay benefits.

☐ A crisis in the repurchase agreement market results in investors holding the bag for more than $500 million in uncollateralized repos.

☐ Pension funds become investors in hostile takeovers by purchasing "junk" bonds issued to finance the takeovers.

☐ Pension executives continue to pressure service providers to keep costs down by lowering trading/transaction costs, using soft dollars, doing directed trades with cash rebates and using incentive fees whenever legally possible. At the same time, the Department of Labor and the Securities and Exchange Commission take a hard look at soft dollars.

☐ Pension funds continue to lock up gains, putting billions of dollars into dedicated and immunized bond portfolios.

☐ A federal appeals court rules, in a case against Grumman Corp., that trustees still may be liable if the use of plan assets in fending off a takeover results in a short-term loss, even if the pension fund ultimately profits financially from the action.

☐ Pension funds enter new investment areas, such as participating annuities in terminations, portfolio insurance and secondary guaranteed investment contracts.

☐ A federal judge rules the Operating Engineers Local 675 pension fund did not violate law by financing, building and leasing a headquarters for the union and the pension fund.

☐ Index funds gain the most new money from institutional investors.

Please send this list, with your responses to:

Nancy K. Webman
Pensions & Investment Age
740 N. Rush St.
Chicago, Ill. 60611

Responses, which should be anonymous, must be received by Dec. 16. Results will be published in the Jan. 6 issue of *P&I Age*.

PIPER

The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. *PIPER details comparative performance data on equity and fixed-income funds at more than 200 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

First of Neenah, Citicorp funds top rankings

By Alan Krauss

Two pairs of specialized commingled equity funds turned in top performances for the year ended Sept. 30, according to the latest Pensions & Investments' Performance Evaluation Report.

Pooled special equity funds run by the First National Bank of Neenah in Wisconsin had the first- and fourth-highest returns for the year. Citicorp Investment Management Inc., New York, had the second- and third-best performing funds for the period.

First of Neenah's $5.7 million regional bank fund was the top-performing special equity fund for the quarter — returning 4.8% as well as the year — returning 43.1%.

In a quarter marked by an erratic market whose volatility was virtually the only constant, the median PIPER fund declined 4.8%, while the Standard & Poor's 500 stock index fell 4.1%.

In addition to First of Neenah's, only one other fund tracked by PIPER had a positive return during the quarter: the special equity fund run by Northern Central Bank, Williamsport, Pa., which gained 0.3%.

Kenneth J. Brusda, vice president and trust officer at First Neenah, said the fund's objective has remained constant.

"We make what I call 'the bank doubleplay,'" Mr. Brusda said.

"We look for high-quality bank stocks at reasonable prices. We also look for likely takeover prospects in states that have, or are close to having, laws permitting interstate banking."

Mr. Brusda said he likes the stocks of banks with between $200 million and $4 billion in assets, because larger banks are more likely to acquire than be acquired.

Among the principal holdings in the regional bank fund portfolio during the third quarter were: **Second National Corp.**, Saginaw, Mich., and **Union Trust Bancorp.**, Baltimore. Both banks were acquired during the third quarter by Sovran Bank of Richmond, Va., Mr. Brusda said.

Other significant positions are in **First Bancorp Ohio**, Akron, which Mr. Brusda called an "attractive" takeover candidate; **Suburban Bancorp.**, Bethesda, Md.; and **Mercantile Bankshares**, Baltimore.

During the quarter, the portfolio sold off a position in **Arizona Bancwest** after the bank announced it had agreed to be acquired next fall.

"We know bank stocks will come to be more widely recognized at some point in the future, when price-to-book ratios become more normal and the states have all passed interstate banking laws," Mr. Brusda said. But he said he sees another 12 to 18 months before the trend runs out of steam.

"We're still putting money into the area, but we're cautioning ourselves not to get overenthusiastic."

Mr. Brusda also manages First of Neenah's $3 million equity-income fund, which had the fourth-best performance both for the quarter, -0.5%, and for the year, 27.9%.

He believes the equity income fund will be successful over a longer term than the bank fund because its central concepts can be applied to many different industries.

The fund's investment objectives center on high current yield and high capital appreciation, according to Mr. Brusda. He cited four legs to its investment strategy: high-yield common stocks; convertible securities; the selective sale of call options on the stocks; and real estate investment trusts.

Mr. Brusda observed his strategy lends itself to a contrarian style, because "yield can't always be found in popular stocks." He gave as an example **Beatrice Cos.**, which he bought for its "decent" yield of about 6%. "It was a comfortable, 'sleeper' holding, that some people thought dull," he said. "But we've watched its stock price rise from $30 to $44 as the (leveraged) buy-out (by Kohlberg Kravis Roberts & Co.) proceeded."

Significant portfolio positions liquidated during the period were **Marsh & McLennan Cos. Inc.**, **Phillips Petroleum Co.** and **Unocal Corp.** Large holdings retained at the end of the third quarter included **Philip Morris Inc.**, **Commonwealth Edison Co.** and **Browning-Ferris Industries Inc.**

About 10% of the portfolio is in REITs. Mr. Brusda said, including **New Plan Realty Trust** and **First Union Real Estate and Mortgage Trust**.

The second and third positions in the one-year period were occupied by Citibank's special situations fund, with a return of 30.6% over the year, and Citibank's fund specializing in emerging health care issues, 28.9% for the year.

Ronald Wiener, vice president and portfolio manager of the $250 million special situation fund, said its results over the past year follow from the fund's overall strategy, which keys on secular changes in companies or industries.

"We try to anticipate events that will change the operating dynamics of a company," Mr. Wiener said, citing as examples asset restructuring or changes in an industry's regulatory environment.

The special situations fund has been heavily invested in the deregulated broadcast media stocks, including **Storer Communication Inc.**, **American Broadcasting Cos. Inc.**, **Capital Cities Communications Inc.** and **Viacom International Inc.**

A second area of concentration for the special situations fund was in the airline industry, where deregulation intensified the competitive environment, putting the major airlines in a "terrific position" to consolidate their routes and cut their fares, he said.

The new environment created opportunities for successful regional lines to find secure niches in the market.

Among the airline holdings of the portfolio over the year were **American Airlines Inc.**, **UAL Inc.** and **Alaska Airlines Inc.**

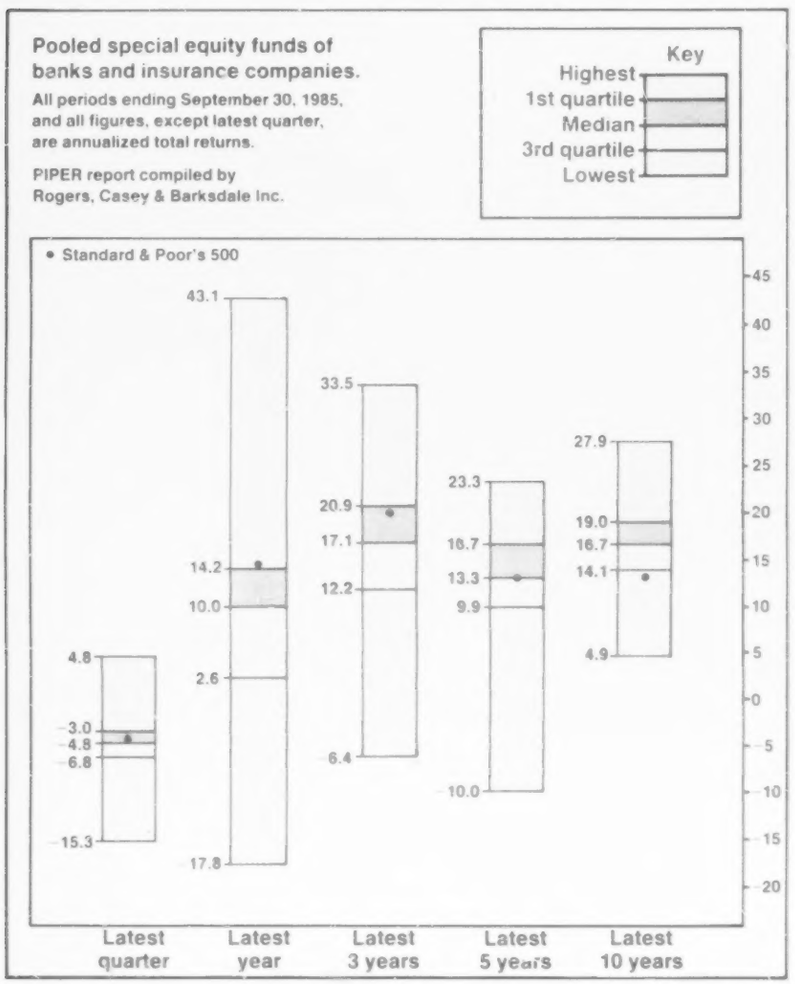
Finally, Mr. Wiener has identified the toxic-waste disposal industry as subject to increasing governmental regulation. Stricter licensing and environmental controls as well as growing political awareness of the country's toxic waste problems have made it even more difficult for waste-disposal companies to open new sites.

"It's now extremely difficult to get into the toxic-waste business, so the major players have great pricing flexibility," Mr. Wiener said, citing **Waste Management Inc.**, **International Technology Corp.** and **Environmental Systems** as the portfolio's major holdings in the industry.

For the one-year period, the median PIPER fund returned 10%, against the S&P's gain of 14.6%.

For the three-year period ended Sept. 30, the median PIPER fund returned 17.1% on an annualized, compound basis, underperforming the S&P, which gained 20.1%.

Continued on page 12



Top-down strategists leaders in international arena

By Rose Darby

International equity managers using top-down strategies took the laurels in the most recent Pensions & Investments' Performance Evaluation Report.

The PIPER international universe consists of 25 bank and insurance company commingled equity and bond funds. Equity and bond performance results are compared on an equal basis because of the small size of the universe.

For the quarter ended Sept. 30, Bank of America, San Francisco, with its $35 million International Employee Benefit Equity fund was the top performer, with a 21.1% total return.

"We have been a premier bond manager and we're applying the disciplines from the bond side to the equity markets," said Francois Dennery, vice president of BAIMCO International Ltd.

"We've tried to identify the climate where the surprises are going to occur," said John Horseman, investment manager, who oversees the fund.

An exposure was adopted that would act best if there were disappointments in the continued growth expectations of the U.S. economy, he explained.

To take advantage of that scenario, commodity stocks, technology-related stocks and general business spending issues were avoided, said Mr. Horseman.

"We've been more active in the stocks of retailers in Europe, Japan and the United Kingdom," he said. "And, we've bought utilities, including telephones and electric and gas issues, and stocks in the financial areas like banking and insurance companies.

"We've adopted an above-average exposure in these areas."

Second for the quarter was Aetna Montagu Asset Management, Hartford, Conn., with a 20% total return.

Citicorp Investment Management, New York, followed with 19.6% and Bank of America's International Employee Benefit Fixed Income Fund was fourth with 18.7%.

By comparison, the Capital International Europe Australia Far East index had a total return of 14.9% for the third quarter.

In the one-year period ended Sept. 30, none of the managers in the universe topped the EAFE's 41.2% time-weighted total return.

Following close on the heels of the market was Aetna Montagu, which was the champion fund for the year with a 39.2% time-weighted total return.

The $105 million international equity fund is managed out of Aetna Montagu's London office, said Christian Thwaites, assistant vice president in Hartford.

He attributes the fund's performance to a decision earlier this year to de-emphasize the stocks that would benefit from strong U.S. exports.

The benefits that these issues experienced from export sales and growth already have been fully discounted at the stocks' current levels, he explained.

"We placed extra emphasis on domestic areas of economies and stock markets in Japan, West Germany and the United Kingdom," Mr. Thwaites said.

For example, while the EAFE index was at a 45% weighting for Japan, Aetna Montagu's fund had a 46% to 47% weighting, he said.

"In Japan, we went slightly overweighted because we identified huge cash inflows coming into the market from Japanese mutual funds," he said.

This thought process brought the fund's managers to look at the domestic economies of various countries in a way that is not customary, he said.

"There was this sudden attraction of the domestic economies, which had never been looked at before by foreign investors," he said.

This led to the purchase of stocks in domestic areas such as real estate, transportation, construction, retailers and banks and financial companies, he added.

Second for the one-year period was American National Bank & Trust Co. of Chicago's International Equity Fund with a 39.1% time-weighted total return. The $10 million fund is a passively managed.

Continued on page 13

Neenah, Citicorp . . .

Continued from page 11

The top PIPER fund for the three years was the aggressive equity fund run by Fidelity Management Trust Co., Boston, which had an annualized, compound return of 33.5%. The second- through fifth-best returns for the three years were: Citicorp's real estate stock fund, 32.2%; Citicorp's special situations fund, 28.1%; Equitable Bank of Baltimore's special fund, 28%; and Provident National Bank of Philadelphia's special equity fund, 26.8%.

For the five-year period, the top-performing pool was Citicorp's real estate stock fund, which returned 23.3% compounded annually.

According to Anne Mengden, Citibank vice president and co-portfolio manager, over the five-year period the portfolio has reflected swings in emphasis between the commercial and residential sectors of the real estate markets.

When the fund began five years ago, the portfolio was distributed fairly evenly between the two sectors, she said.

In 1982 and early 1983, the emphasis was on such residential-sector companies as homebuilders and mobile-home manufacturers. Over the past year, the emphasis has shifted strongly to the commercial sector, reflecting the managers' belief that REITs are "the purest way to invest in income-producing real estate through the stock markets," because they own portfolios of real estate, the income from which is distributed as dividends.

The portfolio is now weighted about 20% in commercial development companies, 60% in REITs and 20% in companies that are indirectly in the real estate business. Examples of each are: **First Union Real Estate Investments** and **Federal Realty** (trusts); **The Rouse Co.** and **Bay Financial Corp.** (developers); and **Lomas & Nettleson Financial** and **Newhall Land and Farming**.

The second through fifth positions for the five years were occupied by Provident National Bank, 21.6%; First National Bank of Maryland, 20.5%; Chase Manhattan's value equity fund, 19%; and California First Bank's supplemental equity fund, 17.7%.

For the 10 years ended Sept. 30, the top performer was the growth fund of MBank, Houston, 27.9%. Second through fifth were: Equitable Bank, 26%; Northern Central Bank, 22.8%; First of Maryland, 22.8%; and Chase Manhattan, 22.2%.

The median PIPER fund returned 16.7% compounded annually over the 10-year period; the S&P gained 13.5%.

PIPER is compiled by the consulting firm Rogers, Casey & Barksdale, Stamford, Conn. ■

Commingled special equity funds

3-month returns

	%
First of Neenah (Reg. bk.), Wis.	4.8
Northern Central, Pa.	0.3
Chase Manhattan (Val. eq.), N.Y.	−0.5
First of Neenah (Eq. inc.), Wis.	−0.5
Man. Hanover (Uncommon), N.Y.	−1.0
Metropolitan Life (No. 5), N.Y.	−1.1
Natl. Bank of Commerce, Tenn.	−1.4
First of Boston (Eq. II)	−1.5
Natl. Bank of Detroit (Op.)	−1.6
First of Minneapolis (No. 20)	−1.6
Pittsburgh Natl. (QRC), Pa.	−1.9
Manufacturers Detroit (I)	−1.9
Man. Hanover (Sup. eq.), N.Y.	−1.9
Citicorp (R.E. stk.), N.Y.	−2.0
Wachovia (Div. sp. val.), N.C.	−2.0
Interfirst Bank, Dallas	−2.1
Central Fidelity (Aggres. eq.), Va.	−2.7
Chemical Bank (Com. stk.), N.Y.	−2.7
Trust Co. of the West (Val. add.)	−2.7
Society National, Ohio	−2.8
American Fletcher, Ind.	−2.9
Provident National, Pa.	−3.0
First of Maryland	−3.0
Standard & Poor's 500	**−4.1**

1-year returns

	%
First of Neenah (Reg. bk.), N.Y.	43.1
Citicorp (Spec. sit.), N.Y.	30.6
Citicorp (Health care), N.Y.	28.9
First of Neenah (Eq. inc.), Wis.	27.9
First of Minneapolis (No. 20)	26.6
Fidelity Mgmt. Tr. (Ag. eq.), Mass.	22.8
First of Boston (Eq. II)	21.5
Citicorp (R.E. stk.), N.Y.	20.4
Merchants National (No. 2), Ind.	19.6
Trust Co. of the West	18.9
Old Second Natl. (No. 10), Ill.	18.8
First of Maryland	18.7
Metropolitan Life (No. 43), N.Y.	17.9
Summit Trust Co., N.J.	17.7
Mutual of New York (Eq. inc.)	17.4
Natl. Bank of Detroit (Op.)	17.2
First of Boston (Eq. yld.)	16.3
Mellon Bank (Spec. stk.), Pa.	16.0
Bank of Amer. (Em. bene.), Calif.	15.2
Standard & Poor's 500	**14.6**
Connecticut Natl. Bank (Sup. eq.)	14.4
Chase Manhattan (Inter. cap.)	14.2
MBank, Austin (Keogh)	14.2
Pittsburgh Natl. (QRC), Pa.	14.2

3-year returns

	%
Fidelity Mgmt. Tr. (Ag. eq.), Mass.	33.5
Citicorp (R.E. stk.), N.Y.	32.2
Citicorp (Spec. sit.), N.Y.	28.1
Equitable Bank, Md.	28.0
Provident National, Pa.	26.8
First of Maryland	24.7
Connecticut National Bank	24.5
Wachovia (Div. sp. val), N.C.	24.1
First of Boston (Eq. II)	23.2
Chase Manhattan (Val. eq.), N.Y.	22.9
Man. Hanover (Uncommon), N.Y.	22.5
United Virginia Bank	22.1
Chase Manhattan (Inter. cap.)	21.6
Natl. Bank of Detroit (Op.)	21.5
First of Boston (Eq. yld.)	21.5
First of Chicago (Inst. spec.)	21.4
Bank of Amer. (Em. bene.), Calif.	21.2
Standard & Poor's 500	**20.1**

5-year returns

	%
Citicorp (R.E. stk.), N.Y.	23.3
Provident National, Pa.	21.6
First of Maryland	20.5
Chase Manhattan (Val. eq.)	19.0
California First Bank (Sup. eq.)	17.7
Sentry Life (A), Wis.	17.6
Citicorp (Spec. sit.) N.Y.	17.5
First of Boston (Eq. yld.)	17.4
Prudential (Sm/med cap.), N.J.	17.2
Connecticut Natl. Bank (Sup. eq.)	17.1
Bank of Amer. (Em. bene.) Calif.	17.0
MTrust (Growth), Texas	16.9
First Alabama (Spec. stk.), Mobile	16.8
Norwest Bank (Spec. invt.), Minn.	16.7
First of Chicago (Inst. spe.)	16.7
Standard & Poor's 500	**13.2**

10-year returns

	%
MTrust (Growth), Texas	27.9
Equitable Bank, Md.	26.0
Northern Central, Pa.	22.8
First of Maryland	22.8
Chase Manhattan, N.Y.	22.2
California First Bank (Sup. eq.)	21.3
Bank of Amer. (Em. bene.), Calif.	20.2
Conn. Bank & Trust (Em. bene.)	19.2
Provident National, Pa.	19.1
Morgan Guaranty (Sm. co.), N.Y.	19.0
Standard & Poor's 500	**13.5**

Commingled international funds

3-month returns

	%
Bank of America (Equity), Calif.	21.1
Aetna Montagu (Equity), Conn.	20.0
Citicorp (Equity), N.Y.	19.6
Bank of America (Fixed), Calif.	18.7
Morgan Guaranty (Eq. fd.), N.Y.	18.2
Citicorp (Fixed), N.Y.	17.3
Mellon Bank (Equity), Pa.	17.2
First of Chicago (Non $ fix.)	17.0
Prudential (Foreign Bond), N.J.	16.9
Marine Midland (Equity), N.Y.	16.5
IDS Trust (Coll. Eq.), Minn.	15.7
Fidelity Mgmt. Trust (Eq.), Mass.	15.4
Morgan Guaranty (Bond), N.Y.	15.2
U.S. Trust (Pooled fund eq.), N.Y.	15.1
CIGNA Corp. (Equity), Conn.	15.0
EAFE	14.9

1-year returns

	%
EAFE	41.2

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Aetna Montagu (Equity), Conn. . . 39.2
American National (Eq.), Chicago 39.1
Bank of America (Equity), Calif. . 37.8
Prudential (Global bond), N.J. . . . 36.4
Citicorp (Equity), N.Y. 35.2
CIGNA Corp. (Equity), Conn. . . . 33.8
Marine Midland (Equity), N.Y. . . . 33.1
Chase Manhattan (Glob. eq.) . . . 31.4
First of Chicago (Equity) 31.3
Prudential (Foreign bond), N.Y. . . 30.2
First of Chicago (Non $ fix.) 28.9
Morgan Guaranty (Bond fd.), N.Y. 28.6
Citicorp (Fixed inc.), N.Y. 28.6
Bank of America (Eb. fix.), Calif. . 28.2
Mellon Bank (Eb. Inv. fd. eq.), Pa. 26.0

3-year returns

	%
IDS Trust (Collec. fd. eq.)	30.1
EAFE	28.4
American National (Eq.), Chicago	24.7
Citicorp (Equity), N.Y.	24.2
First of Chicago (Equity)	24.0
Mellon Bank (Eb. inv. fd. eq.), Pa.	23.7
Morgan Guaranty (Equity), N.Y.	22.6
U.S. Trust (Pooled fd.), N.Y.	21.8
Bank of America (Eb. eq.), Calif.	21.7
Centerre Trust (Col. fd. W), Mo.	21.2
American Security (Equity), D.C.	20.9

5-year returns

	%
First of Chicago ($ fixed)	16.5
EAFE	12.7
U.S. Trust (Pooled fd. eq.) N.Y.	11.6
American Natl. (Equity), Chicago	11.5
Citicorp (Equity), N.Y.	10.6
First of Chicago (Equity)	10.4
Morgan Guaranty (Equity), N.Y.	10.2
Morgan Guaranty (Bond fd.), N.Y.	8.8
First of Chicago (Non $ fix.)	7.1

10-year returns

	%
U.S. Trust (Pooled fund)	16.6
EAFE	16.0
Morgan Guaranty (Eq. fd.), N.Y.	15.1
First of Chicago (Equity)	13.2

Top-down . . .

Continued from page 11

diversification fund, said Stephen Manus, vice president, who oversees the fund. "It's a broadly diversified fund with very low turnover.

"There is relatively little transaction cost typically associated with this kind of turnover."

While not exactly an index fund, there has been an attempt to replicate the EAFE.

That is really our goal," Mr. Manus said. "We would exclude stocks in countries because of things such as transaction costs, liquidity problems, or availability problems."

Third and fourth for the one-year period were Bank of America's International Employee Benefit Equity Fund with a 37.8% time-weighted total return and Prudential Asset Management Co., Newark, N.J., with its Global Bond Fund at 36.4%.

In fifth place for the 12 months ended Sept. 30 was Citicorp's International Equity Fund at 35.2%.

For the three-year period, the International Collective Equities Fund of IDS International, Minneapolis, led the pack with a 30.1% compound annual time-weighted total return.

It was the only fund that beat the EAFE, which returned 28.4% for the three-year period.

American National's International Equity Fund was next with a 24.7% compound annual time-weighted total return.

First Chicago Investment Advisors' International Dollar Fixed Fund was first for the five years ended Sept. 30, reporting a 16.5% compound annual total return.

It, too, was the only fund to top the EAFE for the period, which logged a 12.7% compound annual total return.

U.S. Trust, New York, took second place for the five-year period, with an 11.6% compound annual total return on its International Pooled Equity Fund.

For the 10-year period, U.S. Trust was the leader, with a compound annual time-weighted total return of 16.6%, compared with the EAFE's 16%. ■

For public funds entering real estate

Guaranteed contract makes debut

By Alan Krauss

NEW YORK — Public pension funds contemplating their first allocations to real estate can do so in the form of a guaranteed contract.

A new product developed by Metropolitan Life Insurance Co., called a guaranteed real estate contract, will allow pension funds to participate in the real estate market without assuming the higher risk characteristics often associated with such investments.

Like a guaranteed investment contract, the GREC provides for a complete guarantee of principal as well as a regular stream of interest payments. In addition, the GREC provides for a minimum return on investment of 8.5% annually.

However, unlike GICs, which entitle the insurer to all returns above that specified in the contract, the GREC provides for all returns in excess of 9.5%, or one full percentage point above the minimum, to be split 90%-10% between the investor and Metropolitan.

The contract also offers the potential for additional returns based on appreciation when the properties in the GREC portfolio are liquidated, according to Abbott Davis, a Metropolitan Life vice president and head of the insurer's real estate investors services group.

The GREC is oriented toward public pension funds, Mr. Davis said.

It cannot be sold to private-sector plans because Metropolitan is acquiring the properties in the GREC portfolio before the contracts are sold. That means purchase of the contract by private pension plans would contravene provisions of the Employee Retirement Income Security Act.

He said Metropolitan already has purchased or has firm commitments on about $70 million worth of properties that are earmarked for the GREC portfolio. The size of the first contract is projected to be about $100 million, Mr. Davis said.

The product was developed as a result of market research last summer that showed keen interest in such a product, said Mr. Davis.

According to Robert Bott, the Metropolitan vice president-pensions who heads its marketing efforts to public pension funds, the GREC was designed for public pension funds with assets of $500 million or less.

"It's similar to a closed-end fund, except that investors can see beforehand the properties they are investing in," Mr. Bott said.

Closed-end, commingled real estate equity funds raise money first, subsequently identifying suitable investments.

The contract's portfolio, on the other hand, is likely to be quite similar to many closed-end funds, concentrating on research and development facilities, office buildings and retail and light industrial properties. ■

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Cash Management

Industry awareness of 'big day' increases

By Richard J. Gillespie

NEW ORLEANS — Some cash managers might be in for a shock come March 27, and most particularly those cash managers working for investment management and brokerage concerns.

That's the date the Federal Reserve Board's "voluntary" program for regulating the daylight overdrafts on the nation's wire transfer systems snaps into place.

"The world isn't going to end March 27," Elliott C. McEntee, an associate director of the Federal Reserve Board, told a group of cash management industry representatives at the National Corporate Cash Management Conference here Nov. 13.

No one thought it would end. But that just might be the problem, according to Susan Clark Shellington, assistant director of treasury financial services at Bell Atlantic Corp., Philadelphia, who investigated the program's impact on her company's payments flows.

While she agrees the introduction of net debit caps won't be apocalyptic, she does think cash managers who don't investigate its effect on their cash flows before March 27 are taking a big risk.

The conference session given by Mr. McEntee, Ms. Shellington and Richard Matteis, a senior vice president of Manufacturers Hanover Trust Co., New York, seemed to heighten the concerns of cash managers in attendance.

At the outset of the conference, one cash manager even complained the net debit caps issue was a non-issue. But by the end of their session, cash managers were crowding around Ms. Shellington requesting copies of her presentation.

"There have only been a few people who really understood what is going to happen," said Ms. Shellington in a conversation after the conference.

She said she thinks cash managers are underrating the program's importance, and believes it could have a particularly notable impact on cash managers who work for money managers and wire transfer large amounts for investment purposes where time is of the essence.

"Cash managers really do not seem to understand what is going on, and the attitude on the part of the banks and even the Federal Reserve is 'Don't worry, it is not going to affect anyone,'" she said.

"We keep saying, 'That's nice, but we want to be worried.'

"I want to determine for myself that it is indeed a situation that will not affect me, but all the banks that I talk to have a specific way of handling it that is unique to themselves.

"Until you know how they are treating it, you do not know how to reach a solution."

The immediate threat is that a bank that has temporarily exceeded its cap will not be able to wire out its client's funds, at least not until the bank has received sufficient funds from other banks.

Also, a bank fearing it is about to exceed its cap might decide not to send any more payments until it gets some in. If enough banks face this situation, a kind of gridlock might be induced in the wire payments mechanism in which no one gets paid.

Mr. McEntee agreed there is a lot of confusion on the Fed's moves.

"We do not want to disrupt the wire transfer networks in this country, and that is very important because they play an important part in the payments mechanism," he said.

"We have talked to corporations who fear there is going to be gridlock," Mr. McEntee told attendees at an earlier session. "The Fed will not be rejecting any payments come March 1986."

He said the Fed will only be monitoring most transactions on an ex-post basis, although it will be monitoring the transactions of a few banks that are in some kind of trouble possibly every 15 minutes.

Mr. McEntee told the cash managers and bankers intraday overdrafts often occur very early in the morning when banks are moving their Fed funds around the wire transfer networks.

Why should corporations have to pay for the banks that create these overdrafts by repaying their Fed funds early in the morning, one cash manager asked.

"Corporations are not entirely innocent," responded Mr. McEntee.

In fact, he said Fed fund activities are only responsible for about half the average daily net overdrafts that occur on the Fed wire network, which average about $40 billion each day but can peak at much higher levels.

Corporate complicity is also believed to figure in the total average overdrafts of $40 billion on the private wire networks like CHIPS, CHESS and BankWire, as well as in the $40 billion average daily overdrafts on the FedWire's government securities clearing system.

The Fed is using net debit caps to protect the nation's electronic payment networks from what it calls systemic risk, which is the risk of a domino effect. If a bank collapses at a time when it has overdrafts in many other accounts, other banks could conceivably fail, thus causing

Continued on page 21

Fed to launch net debit caps

Cash managers urged to investigate the impact

NEW ORLEANS — According to Susan Clark Shellington, assistant director of treasury financial services for Bell Atlantic Corp., Philadelphia, cash managers must investigate the impact of the Federal Reserve Board's net debit caps program on cash management operations.

Cash managers can begin by making a determination of the direct effect net debit caps will have on their banks, said Ms. Shellington, who offered the following questions as appropriate to be raised with banks.

- What was the bank's most recent primary capital position?
- What progress has the bank made toward risk classification and the required documentation?
- When is the bank board meeting scheduled to approve the risk classification?
- What systems will be in place in March to monitor daily wire volume?
- What steps are being taken to initiate a dry run before the event?
- What is the bank's average daily volume on FedWire, in both dollars and number of transactions?
- At what time does the bank go into an overdraft position?

If a bank typically goes into an overdraft position early in the morning, gradually reversing its position during the day, how will a bank treat its early morning wires? Will they be held until

Continued on page 21

Internal program brings savings

By Fred Williams

DALLAS — The development of an in-house cash management consulting capability saved The Associates Corporation of North America $300,000 last year.

The treasury staff of The Associates achieved the saving through cash management consulting services offered to the company's subsidiaries, The Associates Financial Services Co. and The Associates Commercial Corp. and to their divisions.

Dorothea Winston, assistant treasurer-cash management, said the treasury department took on internal cash management consulting as a way to assist the various divisions in the development of banking relationships as well as to smooth the flow of receipts and disbursements throughout the company.

She said the effort has been so successful that divisional staff now seek advice from the cash management department in developing new services as well as assistance in other areas of financial operations.

"There was a lot of education involved throughout the company," Ms. Winston said. "Some of our operations involved in making loans aren't aware of what banking systems are out there. We teach them about controlled disbursement and what a lockbox is. Cash management has exploded in the industry and in our company."

Ms. Winston said the consulting service is not fashioned after any similar program "but sort of evolved with us and picked up momentum during the last year. I can't think of another company with this kind of consulting operation."

"There are not many people within this industry with our job description. We get involved with our employees and our subsidiary companies. We now get involved, for instance, when they get ready to roll out a new program ... to help them define the program, its parameters. We help them select their banks and offer help with the dos and don'ts regarding the auditing group. We don't tell them how to create their product but we do have an input."

Ms. Winston said the consulting function adds flexibility to the sometimes rigid policies of The Associates' centralized treasury management system and allows the divisions to have a degree of input into the design of their cash management systems.

The Associates, a subsidiary of Gulf & Western Industries Inc., is now the third largest non-bank finance company in the nation. It runs commercial operations out of 84 offices in the United States and Canada that provide financing and leasing services to various industries, including transportation, equipment, communications, business loans and factoring.

The centralized nature of the system helped make the consulting service feasible, she said.

"This all came about because in a centralized cash management system you can dictate these banking responsibilities and end up with a lot of alienated people," she said.

"This way, if we work with them and explain treasury operations to them, we allow them to participate in the final decisions."

The internal cash management consulting function, although informal, "helps keep the lines of communication open" between the treasury department and the various divisions and operating subsidiaries.

The Associates maintains approximately 1,300 bank accounts with 740 banks. Of that, between 25 and 30 are cash management service banks, said Ms. Winston. As of July 31, the company had $8.2 billion in receivables outstanding. Total revenue for the year ended July 31 were $1.7 billion.

The company is a major issuer of commercial paper in the United States and had total commercial paper volume of $36.7 billion for the year ended July 31.

Ms. Winston said the company is preparing a new commercial paper offering through its transportation division for certain dealers with excess short-term cash to invest.

Ms. Winston said the treasury department was asked to help put together the offering and has been involved in the contractual arrangements, banking operations and overall security and control features.

Ms. Winston said the internal cash management consulting service provided by herself and one other assistant treasurer has had a financial impact resulting in a saving of about $300,000 in the past 12 months alone.

The savings resulted from a review of the account analysis forms provided by banks and "weeding out of some services and discontinuing and modifying other services," she said.

The program has resulted in improved cash flow and availability and "has directly affected the profit and loss statements of our various branches," she said. ■

Payden & Rygel index of short maturities assets*

(for month ending October 31, 1985)

	October 1985	Quarter ending 9/30/85	Year to date	2 months ending 10/31/85	Yield level monthly change*
	Unannualized total returns				
90 Day					
U.S. Treasury Bill	0.6003	1.8443	6.9352	8.7934	+15
Domestic C.D.	0.7032	1.9343	7.1811	9.0830	−14
Euro $ C.D.	0.6934	1.9963	7.3159	9.3030	−5
180 Day					
U.S. Treasury Bill	0.5389	1.9181	7.5664	9.8251	+23
Domestic C.D.	0.7645	1.8822	7.5231	9.7888	−22
Euro $ C.D.	0.7456	1.9324	7.7282	10.0114	−15
1 Year					
U.S. Treasury Note	0.7393	1.7717	8.6268	11.4263	−7
2 Year					
U.S. Treasury Note	1.0658	1.8861	10.6787	14.7243	−18

*Figures are unannualized total returns. Year-to-date and 12 month figures linked monthly. 90 and 180 Day Treasury Bill yield level changes on discount basis.

*Basis points.

Source: Payden & Rygel, Los Angeles, California 90017

Late news

ontinued from page 1

ice president-investments.

About $4 billion is in Allied-Sig-al's U.S. master trust; the remain-er is in separate Allied Corp. and ignal Cos. savings plans and Cana-ian, British and other foreign pen-on funds.

A straight mathematical calcula-on would indicate the new com-any will take about $1.1 billion in mployee benefit assets with it. But lr. Tokar said factors such as the ge of the work force in the various usinesses and the numbers of orkers vested in each plan would ffect the division of the assets.

Mr. Tokar said the actuarial ork will be done in consultation ith Kwasha Lipton, Fort Lee, J.; The Wyatt Co., Washington, nd Hewitt Associates, Lincoln-hire, Ill., which are the respective rincipal actuarial consultants for he Allied, Bendix Corp. and Signal ension plans.

He said the final division of pen-on assets will follow the spinoff of he new company, which is ex-ected to be completed in spring.

Settlement upheld

CHICAGO — The 7th U.S. Cir-uit Court of Appeals upheld 2-1 a ower court's settlement of lawsuits rought by participants in the eamsters, Central States, South-ast and Southwest Areas Pension und claiming the fund had been ismanaged and participants were enied benefits.

The 1984 settlement called for, mong other things, $2 million to be aid to private plaintiffs who had rought a class-action suit for alleged enefit denials. That case had been ombined with two others, including he brought by the Department of abor, which charged the fund with ismanagement.

In upholding the settlement, the ppellate court rejected Labor De-artment arguments that the pen-on fund had not been penalized dequately.

Oil, gas investment

MADISON, Wis. — The Wiscon-n State Investment Board has ommitted $15 million to a package f limited recourse notes put to-ether by Apache Petroleum Co., linneapolis.

The $118 million private place-ent by the oil and gas producer ill be used to finance equipment eases and development of about 00 wells in the Gulf Coast area nd the Powder River Basin in yoming recently purchased by pache from Davis Oil Co.

The notes carry a 10% coupon ith an equity kicker. The princi-al is scheduled to be repaid over a x- to seven-year period. Apache fficials estimate total rate of re-rn in the area of 15% to 20%.

Kenneth Codlin, executive direc-r of the $8.75 billion fund, said he Apache deal is its first oil and as investment.

"We have been interested in this ype thing for a couple of years ow," said Mr. Codlin. "Oil and gas ay be in the pits at this point, but will be around for a long time. his is a growth investment."

PRIT return is 10.4%

BOSTON — The Pension Re-erve Investment Trust, which has 701 million in employee benefit ssets, achieved a return of 10.4% r the first three quarters of 1985.

That result is 193 basis points reater than comparable market ndexes for the same period, said aul Todisco, a fund analyst.

The fund, which is managed by he Pension Reserve Investment anagement Board, consists of the eserve funds of the State Employ-es' and Teachers' Retirement sys-tems, and the retirement systems in five municipalities.

Equitable fund ready

NEW YORK — The Equitable Life Assurance Society of the United States launched its first international fund by hiring Daiwa International Capital Management Co. Ltd., New York, and Schroder Capital Management International, London, to manage portions of it.

Daiwa will manage the Pacific Basin portfolio, Schroder will manage the European portfolio, and Equitable Investment Management Corp. will manage an international portfolio.

Late money movers

• DES MOINES, Iowa — The $2.7 billion Iowa Public Employees' Retirement System has added two more equity managers to complete the initial restructuring of its equity portfolio, said a fund official.

Rosenberg Capital Management, San Francisco, was hired to manage an equity portfolio with a small-capitalization stock emphasis. Prudential Asset Management Co. Inc., Newark, N.J., was hired to manage a portfolio of medium-capitalization issues.

No amounts were given.

• NEW YORK — The $300 million-plus American Federation of Television and Radio Artists Pension Fund hired one equity manager and dropped another as part of an asset redeployment, according to Martin Levenson, senior president of Segal Advisors Inc., New York.

The fund selected Cutler & Co., Medford, Ore., to run $10 million. The fund also decided to withdraw its $10 million-plus account in New York-based Bernstein-Macaulay Inc.'s Emerging Growth Trust.

In addition, the fund boosted its allocations to equity index and real estate managers, but declined to provide details.

• LAKE ZURICH, Ill. — The $3.5 million Schultz Bros. Co. pension fund has hired Resource Capital Advisors Inc., Milwaukee, as balanced manager for $3 million, said Carl H. Schultz, president.

Resource Capital replaces Stein Roe & Farnham, Chicago, Mr. Schultz said.

Institutional Fund Consultants Inc., Madison, Wis., assisted in the search.

• BOSTON — The Jewish Memorial Hospital hired Paramount Capital Group, New York, to run an undisclosed amount of pension assets in an option-hedged equity portfolio.

Nat Buchman, trustee of the pension plan, confirmed the hiring but would not disclose the size of the account or the plan's total assets.

Personnel changes

• WASHINGTON — Jerry N. Clark has been named executive director of the United Mine Workers of American Health and Retirement Funds. Previously, he served as the funds' director of operations. Mr. Clark succeeds Herbert Dyer.

• BRANFORD, Conn. — Andrew J. Mazzarella has been elected corporate controller of Echlin Inc., here. He has been a division controller for operations in Echlin's automotive brake and engine systems groups.

• MINNEAPOLIS — Harry Adams, formerly manager of Cargill Inc.'s $240 million pension trusts, has been named executive secretary and investment manager of the $310 million Minneapolis Teachers' Retirement Fund, effective Dec. 1. He replaces Newell O. Gaasedelen, who is retiring.

Mr. Adams' successor at Cargill is Sally Holt, who had been assistant manager of pension investments.

Proper positioning paid . . .

Continued from page 3

Chase Investors Management Corp., New York, discretionary managers of $13 billion in tax-exempt assets, has been fully invested since the middle of the summer, according to Stephen E. Canter, president.

"We've had relatively modest reserves in our large-cap equity accounts," Mr. Canter said. "Our cash position has been minimal, about 5% to 10%."

Bankers Trust — Investment Management Group, New York, with $31.2 billion in assets under management, went into the rally with its equity portfolios between 95% and 100% invested as of the end of the third quarter, said Steve Reynolds, managing director. The manager remained in the market through the middle of November, having raised just 10% cash by the third week of the month, Mr. Reynolds said.

Travers Bell Jr., president of DanBell Capital Management Inc., New York, which manages $50 million, said his firm has only about 8% in cash, in anticipation of further increases in stock prices. The firm has been decreasing its cash position since it peaked in June at about 18%, Mr. Bell said.

Avatar Associates, New York, which manages $470 million, has its managed portfolios fully invested, according to Bruce Poliquin, vice president. Mr. Poliquin said the firm raised some cash in mid-October, but quickly reversed direction.

"We got down to about 70% to 75% equities for about a week, but we put the cash back into the market," Mr. Poliquin said.

"We're now 100% invested," said Carl J. Kludt, president of Tacoma, Wash.-based Portfolio Timing Inc., which manages $4 million. Mr. Kludt said he had accumulated some cash from new clients and from new commitments from existing clients, but that the assets had been put into the market by early November, after the firm's cash position peaked at about 15% in mid-October.

Some Wall Street observers suggested that at least some institutional buying — particularly by mutual funds — contributed to the equities market surge.

Among them was A. Michael Lipper president of Lipper Analytical Services Inc., Westfield, N.J., who noted that there was "a fair amount of bearishness" in the market as recently as September that led "a lot" of market-timing money managers to pull out of equities. Those firms have since reversed themselves, he said.

Robert Kirby, chairman of Capital Guardian Trust Co., Los Angeles, said a decline in equities as a percentage of U.S. corporate pension assets and a concomitant increase in fixed-income holdings have left pension funds with easy access to assets with which to jump into a hot stock market.

"Everyone seems to have overlooked the fact that ... fixed-income portfolios as a percentage of pension assets have grown to almost 50%, Mr. Kirby said.

"A lot of those bonds are in maturities of five years or less — and that means the pension funds have a lot of money to throw at equities.

"It's easy to pooh-pooh the shrinkage in the (equities) universe," Mr. Kirby said.

"But with most corporate pension fund cash flow going into fixed-income investments, a modest swing of 2% or 3% of those assets (into equities) could have an enormous impact" on the stock market.

In addition, Mr. Kirby argued institutions are the most likely buyers of the blue-chip issues whose heavy trading volume and increasing prices have powered the rising Dow Jones average.

The bull market seems to have swept away the skeptics, and contrarians appear to be few and far between.

Dana Investment Advisors, Brookfield, Wis., with $106 million in tax-exempt assets under management, is one investment manager that has reduced its equity position by selling into the boom.

"We think the chances are good that we've hit a major market top," said Jim Ivey, vice president and director of research.

Mr. Ivey said the firm had shifted its equity-oriented accounts from between 75% and 80% invested in mid-October to about 75% to 80% cash a month later.

Linda Newman is senior vice president of Atalanta Capital Corp., New York, which shifted its managed equity accounts to 2% cash in mid-October from 30% cash at the end of August. She said she thinks there is "a lot of money out there with no place to go" as a result of takeovers and stock buybacks.

Atalanta manages $290 million in tax-exempt assets.

The nation's mutual funds also held a high proportion of their assets in cash at the end of September, according to Alfred Johnson, chief economist of the Investment Company Institute, Washington. Mr. Johnson pegged the cash position of an $85.1 billion universe of mutual funds tracked by the institute at 10.2% as of Sept. 30. The figure is the highest since January of this year, he noted. ■

Funds return to equity . . .

Continued from page 3

Leon Cooperman, chairman of the investment policy committee at Goldman, Sachs & Co., said the move into stocks could be seen as a sign of the narrowing relative returns between stocks and bonds.

Bonds had been trading at record real rates of return while stocks had been weighed down by the moderate economic growth and strong dollar.

"You no longer have the relative value argument bearing down on the equity market," he said.

In addition, public pension funds, which have been breaking down the legal barriers to equity investment, resumed their equity investment programs months before the mid-November rally.

They had doubled equity holdings recorded at the beginning of 1983 to more than $123 billion at mid-year 1985, after heavy buying in the first half, according to the Federal Reserve Board's figures.

Public pension funds were net purchasers of $16.52 billion worth of stocks during 1983. Activity fell off in the first half of 1984, but bounced back to set record levels in the second half.

In the first quarter of this year, public funds purchased a net $7.07 billion in stocks. In the second, they threw in another $4.74 billion.

When activities from both private and public pension funds are taken together, the trend shows pension plans have been providing substantial cash flow into the equity markets after the dry period of declining participation.

In 1983, for example, the flow of pension assets into the equity markets was steadily eroding. On aggregate, pension funds were net sellers of equities in the first half of 1984. Buying resumed in the second half and reached a healthy $11 billion in net purchases in the first quarter of 1985, before falling off to $5 billion in the second quarter of this year.

At the same time, private pension fund purchases of fixed-income instruments have remained strong throughout the period. That means money managers dipped into cash reserves to help their pension fund clients become net purchasers of equities, analysts said.

Some players drew on their cash reserves to take positions in longer-term assets as early as the second half of 1984, according to the figures.

One such player was Morgan Guaranty Trust, which was reported to have drawn heavily on its cash reserves to move deeper into both the equity and fixed-income markets starting July 1984. One consultant reported Morgan had increased its equity allocation by as much as 10% at that time.

A spokesman for the bank, who did not wish to be identified, confirmed the bank had substantially lowered its cash position then. He said the bank had increased both the equity and fixed-income components of its accounts.

"Right now, I suspect there are very few investment managers holding a lot of cash by design," said Paul Troup, a vice president with William M. Mercer-Meidinger Inc., Louisville, Ky.

"The big kahunas are saying, 'Let's get into the market, this is a hot ticket,'" he said a week before the mid-November rally.

According to Mr. Berg, cash reserves were drawn down by investment managers when yields on cash began to drop to 7.5% from 9%. That's because they could get a 6% yield in dividends on stocks and take advantage of any upside potential.

"A lot of those cash balances were drawn down not because the equity market was attractive, but because cash returns had fallen," he said.

"I have attended a number of meetings where the client has asked his manager why he had 15% in cash.

"After enough of those meetings, the investment manager gets the message. He realizes he had better get invested in something with some upside potential."

Ralph Acampora, a vice president and technical analyst at Kidder, Peabody & Co., New York, said he thought the stock market had become attractive to pension funds because of the "strong leadership" provided by blue-chip stocks.

For the second half of 1983 and most of 1984, the blue chips have done well, he said.

"I think that is a lure as far as equities are concerned. I suspect that if that continues, it will be a magnet for that kind of investment," he said.

Mr. Berg also pointed to the growing commitment of managers to the disinflationary scenario, where declining interest rates and a continued weakening of the dollar would make U.S. companies more profitable.

"Smokestack America may be on the way to recovery, and that is another flavor that I hear," he said.

The Federal Reserve Board's figures are compiled to track net purchases or sales of equities by various categories of investors, including private and public pension funds, as well as by households.

The figures showed private pension plans held a record $330 billion worth of equity market securities as of June 30, up from $248.5 billion at the end of 1982, and $312.5 billion at the end of the third quarter of 1983, which was before the selling was first noted in the Z-1 results. ■

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Interest is rising in oil, gas

By Fred Williams

A few pension funds took another look at oil and gas investments during the second half of 1985 as oil prices firmed somewhat, but industry experts don't expect a wholesale return to the oil field by pension funds.

Apache Petroleum Co., Minneapolis, met with some success in its efforts to lure new pension investors into the market. That followed almost a year in which pension funds were leery of oil and gas deals in the face of uncertain market conditions and softening oil prices.

Marketers of some oil and gas deals have been able to raise funds from existing clients continually for a variety of deals, but few added new pension players until recently.

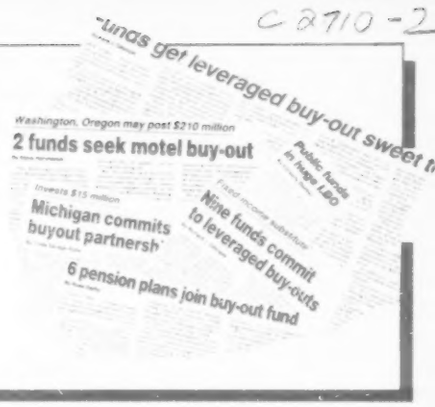
Apache closed its fourth private placement deal in October with eight investors, including four pension plans, totaling $118 million.

Investors included the Wisconsin State Board of Investment, $15 million; Minnesota State Board of Investment, $23 million; Minneapolis Employees' Retirement Fund, $10 million; and Teachers' Insurance & Annuity Association-

Continued on page 61

Leveraged buy-outs

A special section on management buy-outs, the future of LBOs and returns is on page 41.



Pensions & Investment Age

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Texaco aftermath

Investors uncertain

By Barry B. Burr

Some institutional investors face fiduciary as well as investment decisions as they wrestle with what to do with their holdings of Texaco Inc. as a result of the $10.5 billion judgment against the company.

Other institutions, including index funds, acknowledge uncertainty over Texaco's future, but aren't dumping the company's stock. In some cases, they even are continuing to buy it.

Still others are taking profits. The Teacher Retirement System of Texas, Austin, has made about $9.7 million in profits since a Texas jury ordered Texaco, White Plains, N.Y., to pay Pennzoil Co., Houston, the award. Fund officials sold off about half the holdings in Texaco and Pennzoil, said Clark P. Manning, the fund's deputy executive secretary-investments.

"We took some insurance out in the way of a $10 million profit," Mr. Manning said.

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Seven pool $86 million for partnership in turnarounds

By Barry B. Burr

Seven institutions, including the pension funds of Boeing Co. and GTE Corp., the Oregon Public Employees' Retirement System and Harvard Management Corp., are pooling $86 million in a limited partnership to invest in potential turnarounds of high-risk, financially distressed companies.

The newly organized partnership, formally called the Oppenheimer-Palmieri Workout Fund limited partnership, is the latest and one of the few set up to take equity positions in troubled companies that look like they may recover.

A similar fund, the Smith Vasiliou Special Situations Fund limited partnership, raised $70 million, mostly from institutions, and began investing in January 1984.

Executives at the funds and at institutions were unaware of any similar funds for institutions.

Gregory Densmore, director of investment evaluation at GTE Investment Management Corp., Stamford, Conn., described its recent commitment to the Oppenheimer-Palmieri fund as a sort of equity equivalent to junk bonds.

In hopes of turning around the failing companies, including some in bankruptcy proceedings, managers of the Oppenheimer-Palmieri fund plans to take active operating control of the companies' management.

Basil Vasiliou, a Smith Vasiliou fund general partner and an associate director of Bear Stearns & Co., New York, said the funds have similar methods. Unlike the Oppenheimer-Palmieri fund, the Smith Vasiliou fund doesn't seek operating control, Mr. Vasiliou said, stressing the word operating. Mr. Vasiliou said he and the other Smith Vasiliou general partner, Randall Smith, a former Bear Stearns partner, often do take seats on the boards of the firms in which the fund invests to influence their reorganization and management policy. Mr. Smith now is senior partner of R.D. Smith & Co., a New York securities firm.

Mr. Vasiliou said many of the partnership's investments are in companies that have filed for bankruptcy law protection.

By virtue of the fund's investments, Mr. Vasiliou said, he sits on Richmond Tank Car Co.'s board of directors; Mr. Smith has sat on Manville Corp.'s board.

The Oppenheimer-Palmieri fund hasn't made any investments yet. Ned P. DeWitt II, president of the fund's management group and a Palmieri managing director, said he expects the fund to make its first investment soon. He declined to discuss details until the deal is consummated.

The other institutions investing in the Oppenheimer-Palmieri fund are the World Bank, Washington; the Kamehameha (Bishop) Foundation, Honolulu; and John Han-

Continued on page 63

3 public funds change strategy

By Chuck Paustian and Trudy Ring

Three public retirement systems have made major investment changes totaling more than $1.4 billion.

• The $2.6 billion Iowa Public Employees' Retirement System, Des Moines, has made its first moves into venture capital and real estate. It committed up to $17.5 million to five venture capital funds, while it chose one real estate manager and is finishing arrangements with three others, said Dennis Jacobs, deputy administrator.

• The $320 million Colorado Fire and Police Pension Association, Denver, hired two fixed-income managers for a total of $75 million, released a balanced manager and reallocated $162 million, said David A. Powers, executive director.

• The West Virginia Board of In-

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Late news

Pennsylvania taps 9

HARRISBURG, Pa. — The $5.4 billion Pennsylvania State Employes' Retirement Fund has hired four small- to medium-capitalization equity managers and five venture capital managers, according to Kenneth G. Mertz II, the fund's new chief investment officer.

All nine managers are in Pennsylvania, which Mr. Mertz said was not a prerequisite. The venture capital managers will have an in-state investment bias.

Continued on page 62

International markets have drawn more attention in 1985 and are expected to remain popular in 1986. The options floor of the Sao Paulo, Brazil stock exchange is shown here. The international section begins on page 13.

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* November indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	6.9	25.7	29.0
Russell 3000[1]	7.1	26.6	29.7
Ryan Index[2]	2.5	19.7	21.5
SLAE Gov't./Corp.[2]	2.3	17.7	19.4

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

Spinoff/termination cited

Celanese exec goes to UMW

By Chuck Paustian

WASHINGTON — Charles S. Stephens, assistant controller and corporate pension officer of Celanese Corp., has resigned to become director of investments for the $3.5 billion United Mine Workers of America Health and Retirement Funds.

Mr. Stephens cited the company's spinoff/termination of its defined benefit plan as the reason for his departure.

He said he left for "the challenge of being a pension officer for an extremely large fund as opposed to being the pension officer at Celanese, which is now a small fund."

In January 1984, Celanese recaptured more than $325 million through the spinoff/termination of its defined benefit plan.

As a result, Mr. Stephens said, the plan shrunk to about $40 million in assets; the next company contribution is scheduled for September 1986.

He said it would be "a number of years" before the plan surpassed the $100 million level.

"It was simply a decision on my part to search for a more challenging position with a large, growing plan," said Mr. Stephens.

Joseph Bereswill, director of corporate communications at Celanese, said a replacement for Mr. Stephens has not yet been named.

Francis McCarthy, a consultant, will assume the pension responsibilities and David Bullock, risk manager, will handle the insurance activities. Both will report to Arthur A. Cooksey, vice president and controller.

Except for learning the nuances of Taft-Hartley funds, Mr. Stephens said, he does not expect the transition to be a difficult one.

"Essentially my role here as director of investments is very similar to what I was doing at Celanese," he said.

His responsibilities will include overseeing the union fund's stable of more than 20 external investment managers as well as a small portion of fixed-income assets managed internally.

He replaces Linda Taylor, who left in January to become the investment manager of the International Union of Operating Engineers' Central Pension Fund (*Pensions & Investment Age*, Feb. 4).

Mr. Stephens will report to Jerry N. Clark, the new executive director.

"I report to Mr. Clark, but respond to the board of trustees on investment matters. It's very similar to a corporate setup, where you have one person to whom you report and a committee with general responsibilities," Mr. Stephens said.

He said he has no current plans to alter the investment strategy of the fund.

In a related matter, the UMW trustees plan to spin off into a new plan the portion of the plan covering construction workers. Sources estimate the new plan would have between $75 million and $80 million in assets and would be fully funded.

The spinoff, intended for next spring, would affect between 2,000 and 2,500 active participants.

William Howe, general counsel for the Association of Bituminous Contractors, said the spinoff would facilitate the collective bargaining process.

"Construction and mining are

Continued on page 58

Charles Stephens

Pension funds hire more growth stock managers; cut down on value firms

By Fred Williams

Pension funds are hiring more investment managers with a growth orientation and fewer value managers to capitalize on current market conditions and extend somewhat their investment horizons, consultants say.

Between July and October of 1985, 62.5% of SEI Funds Evaluation Services' manager searches were for growth managers, while 37.5% were for value-type managers, said Dave O'Donovan, vice president of the manager search group in Chicago.

During the first half of the year, nearly 90% of the searches were for value managers, Mr. O'Donovan said.

In 1984, about 75% of the SEI searches were for value-type investment managers, he said.

The tilt toward growth managers indicates a lengthening of their investment horizons, he said. "Most are for diversification reasons rather than as a result of terminations, which leads us to believe they are taking a long-term focus."

Don Gingery, director of investment management research at William M. Mercer-Meidinger Inc., Louisville, Ky., said pension executives are leaning toward growth managers in hopes of applying a contrarian approach. In the past, he said, they followed the herd instinct in hiring a manager based on past performance.

"It's contrarian to the extent that they were hiring firms with the best records the year before. Sponsors usually buy when they are at the top of the market, and it has been a difficult year for the growth area. It would be difficult to find one at the top of the performance list," he said.

"Sponsors are thinking now about what their performance will be in the future, so they are thinking about growth and whether that style is represented in their fund.

"With the trend toward a deflationary economy and decreasing interest rates, people are looking at earnings and quality. We are in a different environment than in the past couple of years. Growth is

Continued on page 62

Plan sticks with stock

By Steve Hemmerick

BERKELEY, Calif. — The University of California Retirement System is planning to hold fast to an asset allocation policy that emphasizes common stock investment and has produced top performance.

The $5.2 billion system has a policy of investing about 75% or more of its assets in stocks, a percentage held by few corporate funds and even fewer public ones.

The fund's performance seems to justify its policy. It has scored in the top quartile of the SEI Funds Evaluation Services universe for the one-, five- and 15-year periods ended June 30, according to Patricia Small, the university's associate treasurer.

The fund returned 32.1% for one year, 15.7% compounded annually for five years and 10.2% compounded annually for 15 years.

Its cumulative return for 15 years has been 327.5%. When bond substitutes, such as utility stocks, are added, the university portfolio is about 85% stocks.

Yet the fund's beta, or measure of risk, has declined since 1973, said Herbert M. Gordon, university treasurer.

The beta declined to 0.93 from 1.09, meaning the portfolio now is about 7% less risky than the Standard & Poor's 500 stock index, when it used to be 9% more risky.

And, Mr. Gordon said, the university has been buying value. Since 1974, the price/earnings ratio on a representative sample of the portfolio's stocks has decreased to 14 times the S&P 500 from 23 times, even though the university focuses on buying high-quality growth stocks, whose p/e ratios tend to be higher than other stocks.

The fund has achieved those returns by managing almost all of the money in-house, with a staff of five professionals.

It uses little real estate and no options. University officials have thought about, but don't use, futures or index funds. The fund does use venture capital, representing about 2% of assets.

Fund officials also are preparing to invest in international securities. When fund officials do invest in those securities, they will use members of the in-house staff to make the international investments, ac-

Continued on page 61

Big clients elude small managers

By Ed Christman

Slow pension asset growth may be putting the squeeze on small money management firms trying to land large pension funds as clients.

With less cash flow for pension funds to allocate:

- Some investment management firms started in the 1982-83 bull market are not growing as quickly as did firms that started a few years earlier.
- Several small firms have merged into larger organizations.
- The use of "farm teams" and specialty managers may be decreasing.
- Some portfolio managers are being discouraged from leaving established firms to start new ones.

"There already is a dramatic reduction in the formation of new firms," said Duncan Smith, a senior vice president at the consulting unit of the Frank Russell Co., Tacoma, Wash. "From 1982 to 1984, there were an awful lot of new firms."

Although precise statistics on the number of new firms launched during that period were unavailable, *Pensions & Investment Age* estimated more than three dozen firms formed were in 1983 alone (*P&I Age*, Nov. 14, 1983).

Good investment returns and funding policies mandated by the Employee Retirement Income Security Act helped bring many corporate pension funds to a highly funded level. Once there, sponsors contributed less money to their pension funds.

In addition, they no longer seem to be enhancing benefits and, instead, are terminating over-funded plans, funneling pension assets into annuities to pay vested benefits, said Don Gingery, director of investment management research for William M. Mercer-Meidinger Inc., Atlanta.

Today, most funding of new managers occurs when other managers are terminated, making the marketplace more competitive, said Russell's Mr. Smith.

And managers getting the most new business offer passive products, agreed Messrs. Smith and Gingery.

"It is very competitive out there," said William L. Goldman, vice president at Winrich, Schaenen &

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Broker surveys, authors clashing

By Richard J. Gillespie

Conflicting results of broker performance surveys have sparked a war of words between the authors.

At issue is whether money managers and their pension fund clients get better trades from brokerage firms charging higher commissions.

The survey commissioned by big brokerage firms showed larger firms had a market advantage in performing trades, while the one paid for by a discount brokerage firm showed there was no difference.

SEI Corp., Wayne, Pa., already markets a survey for measuring such costs in terms of market impact, whether the stock was bought or sold at a competitive price and without the trade affecting the price.

With portfolio turnover now running at historically high levels, the issue is significant. Trading impact costs can shave as much as 60 basis points off a money manager's performance in a year, studies show.

The authors of a more recent survey say they have overturned some previous "myths" on the relative merits of brokerage firms.

Stephen Berkowitz, president of Berkowitz, Logue & Associates, a consulting firm in Columbia, Md., and Dennis Logue, a partner in the firm and a professor at the Amos Tuck School of Business Administration at Dartmouth College, believe SEI's survey created a false impression of the advantages of using large, well-capitalized brokerage firms over the newer breed of discount brokers.

The survey by Messrs. Berkowitz and Logue found no relationship between the size of a brokerage firm and the quality of execution.

They hope their new methodology will provide the basis for measuring brokerage firm performance on an ongoing basis.

To this end, Abel/Noser Corp., the New York discount brokerage firm that commissioned the survey, is offering to analyze broker performance for the first three quarters of 1985 free, on a pilot basis, and on an ongoing basis to any clients who spend at least $5,000 in commissions with the firm each quarter, according to Eugene A. Noser Jr., president.

Mr. Noser said the analysis of the quality of broker executions may provide the key to some money managers' performance, since market impact could reduce the performance of a portfolio by as much as 60 basis points per annum.

But Gilbert Beebower, author of the SEI survey, is outraged.

"Nothing they conclude from their methodology has any merit whatsoever," he commented.

"The issue here is that their methodology is flawed and so discussing their conclusions is irrelevant. I have been in this business for seven years and I cannot understand why intelligent people fall prey to the simplest absurdities, and that is what this is. It's bizarre," he said.

"I get very emotional when I see people coming forward in the press and presenting two equally believable scenarios, both of which are contradicting one another, when in fact I can illustrate that nothing that they have concluded has validity because it was flawed by their methodology."

The principal officers of Abel/Noser evidently were upset at the results of the SEI survey, which Mr. Beebower published earlier this year (*Pensions & Investment Age*, April 15).

The SEI survey, commissioned by Goldman, Sachs & Co. and Donaldson, Lufkin & Jenrette, was generally favorable to big brokerage firms such as the two New York ones that commissioned the survey.

It reported that big brokers with block trading capabilities had a trading advantage in terms of market impact, which traders refer to as the cost of a trade.

The market impact of a trade was substantially larger when executed by smaller brokerage firms than when carried out by a large brokerage house, the SEI Corp. study showed, and the relative advantage of 17 big brokers ranged from 9.7 cents on easy trades when measured on a dollar-weighted basis to 6.3 cents for hard trades.

"We did not find that," Mr. Berkowitz said of his firm's survey.

"We found that there seemed to be no relation between the size of the brokerage firm and the execution.

"Also there seemed to be no relation between the commissions paid and the executions.

"As we analyze more market data, relationships may appear, but we do not think so because we have not seen it in a lot of the portfolios that we analyzed," said Mr. Berkowitz.

For trades of 5,000 shares or less, SEI found the big brokers had less of an advantage, about 1 cent.

Berkowitz, Logue examined more than 5 million separate trades on New York Stock Exchange-listed stocks. They also analyzed the various investment portfolios

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Comparison of dollar weighted average price to closing price for securities listed in the New York Stock Exchange (1st quarter 1985)

Range of shares per transaction	Negative deviations from dollar weighted average price	Positive deviations from dollar weighted average price
10,000 - 15,000	.54%	.55%
15,001 - 25,000	.51	.50
25,001 - 50,000	.51	.48
50,001 - 75,000	.51	.47
75,001 - 100,000	.45	.46
100,001 - 150,000	.52	.45
150,001 - 200,000	.47	.51
200,001 and over	.43	.44
Deviation of close from dollar weighted average price[1]	**.51**	**.59**

[1] Aggregate dollar volume at close: $4.273 billion

Total dollar volume of quarter: $290.4 billion

Source: Data — Francis Emory Fitch, analysis — Berkowitz, Logue and Associates

Stephen Powers, a senior vice president at Bankers Trust, said switching to investment banking takes flexibility, creativity.

Lynn Aylsworth, a senior vice president at FNB Chicago, expects his bank to be in the Top 10 of investment banks.

Commercial banks find way onto Wall Street turf

By Marci Baker

Earlier this fall, officials of R.J. Reynolds Industries Inc. invited investment bankers to come up with ideas for raising capital to help finance Reynolds' acquisition of Nabisco Brands Inc.

While major Wall Street houses rallied to the task, it was a commercial bank — Morgan Guaranty Trust Co. — that won.

Morgan Guaranty proposed to issue overseas $265 million in deutsche mark-denominated, 15-year bonds that, through a swap into dollars, ultimately shaved an estimated 30 basis points from what Reynolds would have had to pay out for a similar U.S.-issued offering.

"A number of investment banks brought up very capable proposals," said John Dowdle, senior vice president of financial services at Reynolds in Winston-Salem, N.C. "But we thought Morgan's deal was much better in terms of the length of the securities and swap characteristics."

Morgan Guaranty is only one of several commercial banks moving onto turf once occupied solely by Wall Street investment bankers. Corporations increasingly are turning to such institutions as Bankers Trust Co., Citicorp and The First National Bank of Chicago to arrange overseas financings, swaps and private placements and to provide other services they traditionally received from Wall Street firms:

Corporate finance

- Ogden Corp., New York, turned to Bankers Trust when it recently sought a financial adviser for a $375 million leveraged buy-out through its employee stock ownership plan.
- General Dynamics Corp., and McDonnell Douglas Corp., both in St. Louis, recently established a Eurocommercial paper and Euronote facility, respectively, through First Chicago Capital Markets, the investment banking unit of FNB Chicago.
- Ryder System Inc., Miami, tapped Citicorp Investment Bank to act as a financial adviser in its recent acquisition of Aviall Inc., Dallas.
- Beverly Enterprises, Pasadena, Calif., hired Manufacturers Hanover Trust Co. to arrange a $30 million, seven-year private placement of debt.

"The banks are definitely becoming league players," said Robert Perkovic, treasurer at TRW Inc., Cleveland, which selected Morgan Guaranty as one of four co-lead managers for a Euroyen issue it sold last December.

Continued on page 18

FASB actions are revealed

Pension rules reflect uniform, not hardline, stance

By Rose Darby

STAMFORD, Conn. — The pension accounting rules the Financial Accounting Standards Board will release Dec. 31 show the board stuck to its guns by creating uniform methods but softened some of the effects on employers.

The rules, prefaced by two years of hearings, will be effective Dec. 15, 1986.

Bits and pieces still could be altered, but four important changes will emerge on Statements 87 and 88, said Tim Lucas, the FASB project manager.

- As expected, all unfunded liabilities will have to be reported on the balance sheet, and more will be disclosed in balance-sheet footnotes.

For example, corporations will have to report unrecognized net gains and losses, unrecognized prior service costs and projected benefit obligations, Mr. Lucas said.

- Using the projected unit credit method, corporations will have to recognize cost, or liability, over the service period of workers.

An earlier FASB exposure draft called for companies to report liabilities based on workers' future salary increases.

The final version softens the blow for many companies because it requires them to report liabilities based on employees' current wages.

- The formula for plan asset valuation will be altered to take into account market volatility.

Pension funds now use the market value of assets to determine valuation. Under the new rules, "a market-related asset value and an estimated long-term, return-on-assets rate will be used to calculate the return-on-assets component of cost," Mr. Lucas said.

- Companies recovering assets by terminating pension plans will record a one-time gain from the move. Previously, that gain was spread over a minimum of 10 years for companies replacing their terminated plans with successor defined benefit plans.

"The document represents a tre-

Continued on page 60

Corporate finance instruments are target for review

By Marci Baker

STAMFORD, Conn. — The Financial Accounting Standards Board is laying the groundwork for what could be a sweeping review of the accounting practices for new corporate financing instruments.

Currency and interest-rate swaps, asset-backed securities, repurchase agreements, Dutch-auction rate preferred stock and putable securities are among the new financing tools that have surfaced during the past two years.

Such a review would take at least two years and would examine whether some current accounting standards are outmoded and whether establishing new, "future-oriented" rules would be more appropriate, said Halsey Bullen, the FASB project manager coordinating the review.

If launched, the long-range project, like the one on pension accounting standards about to be completed, will almost certainly spark debate among issuers, investment bankers and corporate accountants.

"This is going to be a barn burner in my view. The project is needed, but it will be very controversial," said John Stewart, a partner at Arther Anderson & Co. and a member of the American Institute of Certified Public Accountants' task force on financial instruments.

The Financial Executives Institute, whose members are corporate finance executives, already has responded coolly to the idea of a sweeping review, though its members agree some kind of review is needed. The FEI's committee on corporate reporting wrote to FASB, recommending it narrow the scope of the project.

The committee believes a broad-scale review is not warranted, and questions whether it would be manageable, said Joseph Sciarrino, vice president and technical director of the FEI.

FASB officials also aren't certain how manageable a sweeping review would be.

Mr. Bullen said he is setting up a framework for a review, categorizing the hodge-podge of new financing products into broad, theoretical

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Commercial banks find . . .

Continued from page 3

Although banks have been beefing up their investment banking departments since the late 1970s, only recently have they become serious competition for their Wall Street counterparts.

The effort has produced modest gains in commercial banks' share of the investment banking market, statistics from Greenwich Associates, Greenwich, Conn., show.

Corporations tapped banks more frequently for a number of services, according to Greenwich's 1985 investment banking survey of 1,477 senior financial executives.

Commercial banks showed percentage gains in market share for such services as commercial paper issuance, advice on divestitures, industrial revenue bond financing, leasing transactions and project financing. Investment banks either showed no gain or percentage declines in these services.

Banks are placing high on the charts by other measures as well:

• Five banks — including No. 1-ranked Citicorp — ranked among the Top 10 firms underwriting competitively bid, tax-exempt issues during the first nine months of 1985, according to Securities Data Co. Inc., New York.

• Bankers Trust has ranked in the Top 10 among private placement deals for the 1½ years.

• FNB Chicago jumped to 11th place from 25th in private placements for the first half of the year, according to IDD Information Services. And Lynn Aylsworth, senior vice president in charge of the investment banking at FNB Chicago, expects his bank to wind up the full year among the Top 10.

In addition, commercial banks' investment banking efforts have begun to contribute handsomely to the overall bottom line.

William Welsh, a banking analyst at Sanford C. Bernstein & Co., New York, expects an average five-year earnings per share growth of 11% for Bankers Trust. Investment banking, with projected earnings growth of 20% to 25% annually, should contribute about 22% of that, he said.

Investment banking earnings and revenues at Citicorp have grown at a 20% clip during the past five years.

At Manufacturers Hanover, investment banking accounted for 20% of the bank's total income in 1984 and 25% for the first six months of this year, said William Schroth, executive vice president-merchant banking.

The success achieved by major money center banks has intensified efforts to build stronger, broader investment banking capabilities.

In September, Chemical Bank, New York, successfully wooed investment bankers from Wall Street firms as part of a major push to expand its corporate financing activities. Some of Texas' largest commercial banks, including Texas Commerce Bank, N.A., and First City Bancorp., recently set up investment banking groups. And Philadelphia National Bank just opened a London merchant banking subsidiary, Philadelphia National Ltd.

Irving Trust Co., New York, and 11 regional banks formed the Bankers Association for Corporate Finance, a trade organization to bolster the banks' corporate financing capabilities through shared ideas and joint transactions.

"Just about everyone is in investment banking these days. They're in it because everyone else is," said Gary Goldstein, co-managing director at The Whitney Group, a New York executive recruiter. "But I don't think every bank that is in the game now will be there five years from now."

Commercial bankers agree. Only a handful, they say, ultimately will be willing to apply the resources needed to develop a strong broad-based or niche-oriented capability.

In addition, many banks simply won't be able to cross the cultural and compensation barriers crucial to maintaining a strong investment banking presence.

Still, there is strong motivation to try.

Banks have gotten into investment banking as spreads on their traditional business — commercial loans — have narrowed, in part because corporations have turned increasingly to the securities markets to raise capital.

Advances in technology and the internationalization of the credit markets have offered prime opportunities for the largest banks to parlay their huge capital bases and international banking capabilities into merchant banking operations overseas, said Charles Ellis, managing partner at Greenwich Associates.

Most major commercial banks have focused on building investment banking operations on a global scale, where there are fewer investment bank competing.

"Aside from First Boston, Salomon Brothers and Goldman, Sachs & Co., there really aren't any investment banking firms positioned to offer services globally," said David Lovejoy, executive vice president in charge of Los Angeles-based Security Pacific National Bank's merchant banking group. Commercial banks have been able to compete there head-on because they are not prohibited from underwriting foreign securities.

In the United States, the 50-year old Glass-Steagall Act prevents commercial banks from underwriting all but general obligation municipal issues.

Banks are continuing to chip away at the law. Morgan Guaranty, Citicorp and Bankers Trust, for example, have applications pending with the Federal Reserve Board to let securities subsidiaries underwrite commercial paper, mortgage-related obligations and municipal revenue bonds.

Efforts to scrap the law have been unsuccessful. "No one is going to charge up the Hill with legislation that Congress is going to embrace," Mr. Lovejoy said, although he believes the financial trends internationally will ultimately force Congress to scrap the law.

In the meantime, the largest banks have pushed ahead as if Glass-Steagall didn't exist, building on their global presences as well as lending relationships, trading capabilities and other existing strengths to establish clearly defined investment banking product lines.

The task hasn't been easy because it has involved transforming a historically slow moving, bureaucratic internal culture into one with the flexibility and creativity that drives Wall Street houses, said Stephen Powers, senior vice president-corporate finance at Bankers Trust.

The task required setting up an aggressive, performance-oriented compensation structure to attract and retain top investment banking professionals.

"When we started, we told our people that whatever your old job description was has been torn up. You are now in charge of generating all investment banking business. That was the stick," Mr. Powers said. "The carrot was compensation."

As a result of implementing a bonus system tied directly to profit-

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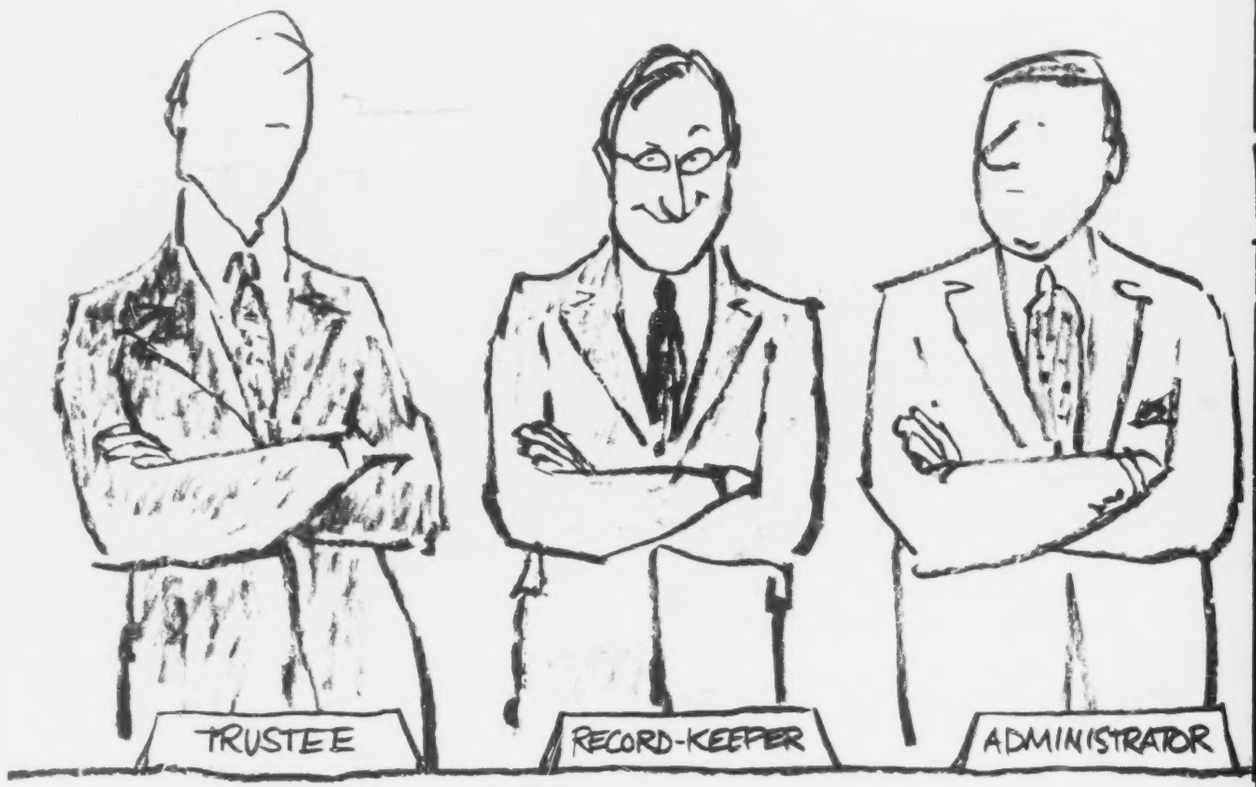

All you need when you need them all...

How use of investment and commercial banks varies by service

Service	Use service %	Use investment bank % 1984	Use investment bank % 1985	1-yr. change %	Use commercial bank % 1984	Use commercial bank % 1985	1-yr. change %
Advice on initiating acquisitions	42	97	96	−1	8	9	1
Commercial paper issue	39	96	93	−3	11	17	6
Advice on divestitures	22	95	92	−3	6	10	4
Financial advice for fee	32	93	93	0	10	11	1
Advice on takeover defense	25	98	97	−1	1	3	2
Industrial revenue bonds	19	48	46	−2	38	41	3
Repurchase of common stock	17	na	95	—	na	0	—
Interest rate swaps	29	53	65	12	70	58	−12
Private placement of debt	20	78	80	2	20	24	4
Leasing	17	60	50	−10	43	45	2
Project financing	18	72	72	0	32	40	8
Public bond offering	20	98	96	−2	6	0	—
Eurobond issue	12	na	81	—	na	28	—
Pollution control financing	10	74	80	6	24	26	2
Debt defeasance	8	78	71	−7	26	25	−1
415 bond offering	11	99	98	−1	na	0	—
Real estate financing	13	72	74	2	30	27	−3

Source: Greenwich Associates, Greenwich Conn.

Commercial . . .

Continued from page 18

ability, he said, "we have not lost anyone from our department in the past three years that we didn't want to lose," despite attempted personnel raids by major Wall Street houses.

Bankers Trust and Morgan Guaranty are credited with the greatest success in overcoming the cultural hurdles. "In some cases, they are paying their people compensation that even the Wall Street firms would find difficult to match," said one executive recruiter.

The commercial banks making inroads in investment banking have integrated their existing strengths, such as a sizable capital base, commercial lending, trading operations and a global presence with their newer investment banking functions, analysts said. They also are stressing innovation within clearly defined frameworks.

For example, relationship managers replaced traditional commercial lending officers at Bankers Trust. They are responsible for identifying the full range of corporate financing needs of their clients.

The bank has restructured to operate like one big merchant bank, Mr. Powers said. Its product line is divided into low-margin/high-volume business (swaps, private placements and Euromarket financing) and high-margin/low-volume business (leasing and venture capital transactions, mergers and acquisitions).

Richard Huber, group executive at Citicorp's investment banking operation, points to the banking institution's global reach — 72,000 people in 2,000 offices in 94 countries — as a key strength.

Clearly, Bankers Trust, Morgan Guaranty and Citicorp will compete on every front with Wall Street houses.

Others are more niche oriented.

Security Pacific, for example, doesn't expect to be a major contender in the mergers and acquisition arena. "It's expensive and has a low ratio of hits to misses. Plus, the investment banks have done a superb job there," said Mr. Lovejoy.

Instead, the bank is parlaying existing strengths into investment banking product lines where officials have determined Security Pacific can compete on a global scale. The bank is developing products that require a high level of technical ability, such as swaps, options, foreign exchange transactions and immunization strategies, he said.

First Chicago, which is building a broad-based investment banking capability, also is carefully defining its markets.

"I don't expect to be active in the big (merger and acquisition) deals," said Mr. Aylsworth. "But there's an awful lot of divestiture and acquisition business we can compete for involving smaller companies or corporate divisions (or cross-border transactions)," he said.

The banks' efforts are paying off: Some corporate officials are more willing to consider them when looking for innovative financing strategies. Thomas Fitzgerald, treasurer at Hershey Foods Corp., Hershey, Pa., said he didn't hesitate to call commercial banks when he was exploring financing alternative to enhance the company's tax situation.

The breakdown in traditional investment banking relationship ties has helped foster a more open attitude.

Ten years ago, Manufacturers Hanover couldn't have approached New York's ITT Corp. because the company did all its public financing with Wall Street firms, said the bank's Mr. Schrotz. "Today, if we build a better mousetrap than our competition, we'll get the business from the company," he said.

Many issuers are more inclined to use banks for overseas financing. "We're not just interested in the rate a bank offers," Mr. Dowdle at Reynolds said. "We want to know bankers have the syndicate and placement capabilities to sell the bonds.

"In the non-U.S. capital markets, some of the commercial banks have developed very strong, innovative capabilities. I'm not sure they are equally as competitive with investment banking firms in the United States."

Citicorp's Mr. Huber conceded issuer attitudes are "something of an impediment" to competing in the United States. "I think its mainly perception . . . but it is there and something banks still have to deal with." ■

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Cash Management

Certification is set for cash managers

By Richard Gillespie

NEWTOWN, Conn. — The National Corporate Cash Management Association passed a major milestone by introducing its own professional qualifications for certifying cash managers.

Cash managers, whether members of the NCCMA or not, now will be able to acquire the title certified cash manager. The first examinations to qualify certified cash managers will be May 31.

"The message is we have this thing set up now and anybody wanting to try it is welcome to sit the exam," said Mario Goveia, chairman of the National Corporate Cash Management Association's certification committee.

The certification committee has been working on the project for the past three years, first under James (Pete) Ruby, assistant treasurer of Holiday Inns in Memphis, Tenn., then under Mr. Goveia, who is manager of domestic banking and treasury administration at Champion Spark Plug Co., Toledo, Ohio.

The form and content of the program has changed several times. An early proposal for a grandfather clause covering long-standing members of the industry was dropped, said Mr. Goveia.

The qualifications for candidacy are final. Cash managers wanting to take the exam will need at least two years in a cash management position, either with a corporation, bank or vendor.

Mr. Goveia said they also will need to have read the study guide "Essentials of Cash Management." The cost of the exam is $150, and $125 for NCCMA members.

The examination will consist primarily of multiple-choice questions the cash management industry's leading academicians worked out with the assistance of Educational Testing Service Inc., Princeton, N.J.

Mr. Goveia said the NCCMA doesn't know how many candidates will show up May 31 because enrollment has not begun. However, 3,000 advance copies of the course guide were ordered.

In anticipation of a high turnout, the committee has worked with Educational Testing Service, which can set up testing facilities across the country to meet demand.

In the meantime, the certification committee is being transformed into a certification counsel of 11 to 13 members, each serving a four-year term. The counsel will monitor the activities of various key committees: testing; publications; recertification monitoring.

The recertification committee is charged with coming up with provisions for renewing certifications. The certified cash manager designation lasts five years, after which time cash managers will have to earn credits to remain qualified or take the examination again.

The current proposal is that certified cash managers will have to earn 60 credits over the next five years, many of which can be earned for general participation in cash management-related events and activities. However, one proposal states at least 20 credits must be in a "treasury-related" area.

Credits can be earned for participation in treasury development projects, regional or national cash management seminars or events and activities such as being a member of cash management assocations or subscribing to accredited cash management publications.

A certified cash manager who holds the designation for 10 years will have earned it for life.

While the certification committee does not see its role as educating the cash management community, Mr. Goveia said, it has established the groundwork.

Education is the role of the NCCMA's education committee, which has produced the guidebook and will conduct three different educational workshops directed toward training cash managers in areas relevant to the examinations.

Emily Penn, a member of the certificiation committee and a senior consultant with Citibank, New York, said the pass rate would be determined by the board, based statistically on the results.

The certified cash manager designation "addresses the needs of relatively inexperienced people," said Mr. Goveia. A higher designation, the certified treasury manager, is on the drawing board.

To qualify for certified treasury manager, applicants will need at least three years experience in cash management-related activity.

This designation will measure not only experience in cash management but also treasury-related areas such as pension fund management, risk management and long-term debt management.

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Payden & Rygel index of short maturities assets*
(for month ending November 30, 1985)

	November 1985	Quarter ending 9/30/85	Year to date	12 months ending 11/30/85	Yield level monthly change*
	Unannualized total returns				
90 Day					
U.S. Treasury Bill	0.6238	1.8443	7.6022	8.5200	-3
Domestic C.D.	0.6297	1.9343	7.8560	8.7656	-10
Euro S.C.D.	0.6504	1.9963	8.0139	8.9619	-5
180 Day					
U.S. Treasury Bill	0.6524	1.9181	8.2681	9.3528	-3
Domestic C.D.	0.5940	1.8822	8.1617	9.2327	-10
Euro S.C.D.	0.6502	1.9324	8.4286	9.4003	0
1 Year					
U.S. Treasury Note	0.7117	1.7717	9.3399	10.7631	-7
2 Year					
U.S. Treasury Note	1.1316	1.8861	11.9312	13.8456	-24

*Figures are unannualized total returns. Year-to-date and 12 month figures linked monthly. 90 and 180 Day Treasury Bill yield level changes on discount basis.
*Basis points.

Source: Payden & Rygel, Los Angeles, California 90017

Potential loss put at $400,000

Poor investments hurt MTA

By Richard J. Gillespie

NEW YORK — The Metropolitan Transit Authority suffered a potential loss of about $400,000 as the result of poor short-term investment practices, New York State Comptroller Edward Regan said.

The MTA's affiliates and subsidiaries include the New York City Transit Authority, operator of the subway system; the Long Island Railroad; the Metro North Commuter Railroad; the Triborough Bridge and Tunnel Authority; and the Metropolitan Suburban Bus Authority.

The short-term investment practices of state governmental organizations have been in the news regularly since the New York State Dormitory Authority lost millions in the collapse of government securities dealer Lombard-Wall Inc. in 1983.

More recently, a variety of New York state school districts lost money doing repurchase agreements with Lion Capital Group.

Unlike other agencies, the comptroller's office did not find that the MTA failed to take delivery of collateral, which was the abusive practice leading to losses at other agencies in the past.

Furthermore, the MTA limited its repurchase agreement activities to transactions conducted opposite the primary dealers.

However, the MTA did fail to mark its collateral to market, an audit found, and failed to execute written agreements with its counter-parties for detailing the rights and obligations of brokers and the MTA, the comptroller's audit shows.

The potential loss of $400,000 did not stem from any failures of the MTA's brokers. It resulted from the MTA's failure to develop an investment portfolio with varying terms to maturity, the audit said.

"The comptroller found that the MTA did not use cash flow analyses, but rather continuously invested the majority of its funds in one-day repurchase agreements, or the three days of weekends," Mr. Regan said in a news release.

"This may be a good practice when interest rates are continuously rising, but will result in lost interest income when interest rates are falling," said Mr. Regan.

According to the report, the MTA was rolling over an average of $535 million daily in repurchase agreements. The only funds invested for longer than three days were bond issue proceeds, and 50% of these proceeds were invested in repurchase agreements on a daily or weekend basis, he found.

The audit said no attempt was made to spread out other funds in longer-term, higher-yield maturities in accordance with the MTA's cash needs.

On Dec. 31, about $850 million, or 76%, of the MTA's $1.1 billion investment portfolio was invested in one- to three-day repurchase agreements.

Photo by Don Forschmidt

An MTA system train travels through New York City.

Specifically, the account set up to handle payments for the New York subway's new rolling stock had 67%, or $82 million, invested in one-day repurchase agreements for almost all of 1984, even though longer-term investments with higher yields were "ap-

Continued on page 40

Search is on to aid cash flow

By Fred Williams

NEW ORLEANS — Cash managers should strike out into other corporate areas like invoicing, purchasing and even the mailroom to root out bugs and glitches that may be holding up company cash flows, according to three cash management representatives.

Jack Wilson, manager of cash control with SCM Corp., New York; Debra Beichler, manager cash and banking relations for the J.M. Smucker Co., Orrville, Ohio; and Peter Lemke, vice president of Society National Bank, Cleveland, advised their colleagues to get involved in basic cash management procedures and to avoid becoming too distracted by other cash management issues, such as the use of high technology.

They gave their advice at the National Corporate Cash Management Association conference in New Orleans in mid-November.

Among the basic cash management procedures they discussed were:

- The advantages of paying banks by fees, rather than through balances.
- The savings to be made by negotiating better payment terms.
- The ways in which to expedite the flow of billing and payments through the system.

Mr. Wilson said treasurers should consider the real advantages to be gained from paying banks in fees rather than through compensating balances.

Besides the real dollar savings, there are other benefits to fee-directed compensation, according to Mr. Wilson.

"Fees reduce the likelihood of overcompensating banks because (with fees) there are no excess balances and so this eliminates radical swings in bank balances," he said.

The fee-based form of bank compensation "raises the visibility of your banking costs within the organization and helps you bring these costs under control even more," he added.

Mr. Wilson noted a cash manager who had a $1 million balance requirement could experience annual net saving of $15,360 by converting from compensating balances to fees, assuming the typical case of a 12% reserve requirement, 7.8% investment rate and a 7.2% earnings allowance.

With balance compensation, the company would have a $120,000 reserve requirement; with an earnings credit rate of 7.2%, the company effectively receives a total credit of only $72,000 on its $1 million, he said.

With fee compensation, the company could invest both the $1 million and the $120,000 at 7.8% and receive $87,360 interest income. The difference between the two figures results in a net savings of $15,360, simply from switching to a fee-based payment form, he pointed out.

He also said cash managers should experience no great barriers to making such a switch, either from the company or from the banks.

"It costs nothing to implement, and our banks have accepted it readily," he said.

Ms. Beichler said J.M. Smucker conducted a payment terms analysis about two years ago that provided the purchasing department with some useful information on the negotiation of better payment terms with vendors.

She elaborated on a variety of payment terms available to purchasers and showed the savings that might result from each.

In particular, she compared a month-end cash payment with no discount option to a variety of discounted payment terms, including one in which the purchaser received a 2% discount for paying early, which she said could result in a substantial saving.

Assuming an invoice amount of $15,000 and an investment rate of 8.5%, the total savings to a company from exercising various payment options, according to the payment terms analysis, ranged from $5,562 with a 1% discount for immediate payment and full payment within 30 days (called 1%-10, net 30) to more than $10,000 with the 2%-two pay method, she said.

"You should show the analysis to your purchasing department to use in negotiating better payment terms," she said. "You may not get

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Pensions & Investment Age

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Looking back, forging ahead

The significant developments of 1985 and the emerging issues of 1986 are addressed in the review and outlook section that begins on page 3. Bond, equity, international, real estate and alternative investments are among the topics addressed.

GAF targets parachute

Surplus is in jeopardy

By Barry B. Burr

NEW YORK — Union Carbide Co.'s recently adopted "pension parachute" may not prevent GAF Corp. from using Carbide's surplus pension assets to finance its takeover of the company.

GAF has filed suit in federal court to block the parachute, raising the fundamental issue of a company's prerogative to protect its surplus pension assets.

The GAF suit, filed in U.S. District Court in New York, seeks to enjoin Carbide from implementing the parachute, saying it "has no rational purpose."

GAF, in a Securities and Exchange Commission filing, cited the surplus assets as a source of financing for its $68-a-share, or $4 billion, cash offer for Carbide.

Carbide adopted the so-called parachute last July as an anti-takeover device. Like those adopted by a number of other companies, Carbide's parachute, to be opened at the company's discretion, would deny hostile suitors its pension surplus by using the excess assets to increase benefits.

In its suit, GAF puts the surplus at $500 million. But the amount is complicated by a spinoff termination Carbide filed in August and that was approved in late November by the Pension Benefit Guaranty Corp. According to data filed with the PBGC, Carbide recaptured in the termination $500 million of an $800 million surplus and left the remaining $300 million in its continuing pension plan.

Despite GAF's hostile bid, Carbide apparently hasn't implemented its parachute to use up the $300 million.

Carbide and GAF officials and attorneys couldn't be reached for comment.

Carbide's termination filing came only several weeks after adopting the parachute last July.

In a spinoff termination, a pension plan is split into two: one for active employees; the other for retirees. The surplus assets Carbide recovered were placed in the plan for retired employees, which then was terminated. Carbide left the remaining surplus in the continuing plan for active employees. Under PBGC rules, annuities have to be purchased to cover all accrued benefits of both groups.

Aside from the pension parachute, Carbide has adopted so-called golden parachutes, another antitakeover device providing big severance contracts, for 42 top executives in the event their "employment is terminated after a change in control" of the company. The golden parachutes are reportedly worth at least $8.7 million for Carbide's top five executives alone.

In addition, the company set up a $15 million trust to pay retirement benefits to executives.

Herbert W. Krueger Jr., a lawyer with Mayer, Brown & Platt, Chicago, who isn't involved with the

Continued on page 38

Single-employer reform bill ready

By Joel Chernoff

WASHINGTON — Senate and House conferees hammered out a compromise bill reforming the single-employer plan termination insurance system, averting an impasse that nearly blocked the long-sought-after legislation.

However, the outcome of the single-employer reforms remained in shadow as of press time. The budget reconciliation bill, to which the reforms are attached, still lacked congressional approval and was rumored to be subject of a potential presidential veto because of provisions concerning cigarette taxes and other issues.

The reforms are designed to shore up the weakening finances of the Pension Benefit Guaranty Corp., whose deficit for its single-employer termination program is estimated at $1.3 billion.

The bill would make it much harder for an employer to terminate an underfunded plan. If a company did terminate such a plan, the legislation would create new employer obligations to plan participants and increased liabilities to the PBGC.

The legislation, if approved by Congress and signed by President Reagan, also would permanently boost the annual premium paid by all employers with defined benefit pension plans to $8.50 per participant from the current $2.60. The increase would take effect for plan years beginning on or after Jan. 1.

Most other provisions would be effective the earlier of the date of enactment or Jan. 1. This rule lets Wheeling-Pittsburgh Steel Corp. off the hook for any additional liability for its terminated plan, despite efforts by other steel companies to have the bill go into effect retroactively (*Pensions & Investment Age*, Nov. 11).

Also significant is the imposition of delays in processing the termination of overfunded pension plans. That provision, sponsored by Sen. Howard Metzenbaum, D-Ohio, underwent minor modifications to make it more manageable administratively, including limiting the rule to plans with reversions of $1 million or more.

In addition, key changes were made in the method of calculating employer liability to the PBGC and plan participants for terminated, underfunded plans of ongoing employers after objections were raised by congressional judiciary committees.

Continued on page 39

GE and RCA merger may alter funds

By Richard J. Gillespie

STAMFORD, Conn. — The planned takeover of RCA Corp. by General Electric Co. has made uncertain the future of the $2.2 billion RCA pension fund.

Among the possible outcomes:

• GE could merge the RCA fund into its much larger $15 million pension fund, following the lead of Allied-Signal Corp., The LTV Corp. and Chevron Corp., all of which consummated mergers in the past 18 months.

• GE pension executives could decide to internally manage the RCA pension assets as they already do with GE's assets. When LTV merged with Republic Steel Corp., for example, the assets were merged and Republic Steel's investment management subsidiary took over management of the combined assets.

• The plans could remain separate, as Conoco's has since E.I. du Pont de Nemours & Co. acquired Conoco Inc. The du Pont plan is internally managed and the Conoco plan, externally managed.

• GE officials could decide to terminate one or both of the overfunded plans, capturing almost $2 billion in surplus assets to help pay for GE's acquisition of RCA. However, one analyst said GE officials already have ruled out that option.

General Electric agreed to purchase RCA Corp. for $6.28 billion, or $66.50 per share, in an all-cash transaction announced Dec. 11.

By terminating both overfunded pension plans and adding the proceeds to the $5 billion cash already

Continued on page 36

Late news

California selects 6

SACRAMENTO, Calif. -- In its first move to fully discretionary outside managers, the $30 billion California Public Employees' Retirement System has selected six equity managers to receive a total of between $600 million and $3 billion, according to Greta Marshall, investment manager.

The managers are: Batterymarch Financial Management, Boston; Citicorp Investment Management, New York; Dimensional Fund Advisors, Santa Monica, Calif.; Fidelity Management Trust Co., Boston; First Chicago Investment Advisors, Chicago; and Rosenberg Capital Management, San Francisco.

The hirings of the six are subject to final negotiations, expected to be complete by February.

Each manager will receive between $100 million and $500 million, she said.

All of the fund's assets had been managed in-house, with Citicorp and Bankers Trust Co., New York, serving in advisory roles.

All six of the new equity managers will be permitted to use bonds in the portfolios, she said.

Continued on page 39

Woolworth seizes asset mix control

By Alan Krauss

NEW YORK — F.W. Woolworth Co. pension fund executives are operating under new investment guidelines giving them more control over the asset mix, a move that likely will lead to restructuring 46% of the $450 million pension fund.

At stake is about $207 million now managed in four fully discretionary, balanced accounts with IDS Advisory Group, Minneapolis; Thorndike, Doran, Paine & Lewis, Boston; Lord, Abbett & Co., New York; and Bernstein-Macaulay Inc., New York. Their accounts with Woolworth range from $11 million to $71 million.

"We weren't in control of the asset mix — it was all over the place," said John H. Cannon, Woolworth vice president and treasurer. "We were getting asset mix by default."

For example, he said, IDS recently had 66% in equities and 29% in fixed income, while Bernstein-Macaulay had 41% in equities and 46% in fixed.

"Determining the asset mix is the most important thing we can do," he said, "because in general the total rate of return depends much more on that than on the selection of individual securities."

Including the balanced accounts, the asset mix of the full Woolworth plan as of Nov. 30 was 45.5% fixed income, 38% equities, 9.5% cash and

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New issues of corporate
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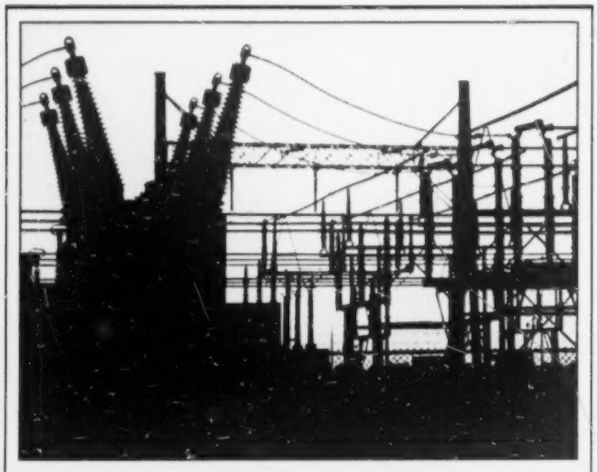

Southern Co. hires 8

Strategy realigned

By Barry B. Burr

ATLANTA — In a major change, Southern Co. has scrapped its long-time balanced-manager investment approach for a style-specific strategy, shifting a large part of its $1.3 billion pension fund among 12 managers.

The fund hired seven equity managers and one fixed-income manager, while dropping a balanced manager.

In addition, it reduced the assignments of four existing managers to specific accounts from balanced portfolios.

Also, as part of the changes, Southern hired its first master trustee.

According to Richard T. Benton, Southern financial analyst, the equity managers hired are: INVESCO Capital Management Inc., Atlanta; Miller, Anderson & Sherrerd, Bala Cynwyd, Pa.; Spears, Benzak, Salomon & Farrell Inc., New York; Jundt/Capen Associates, Minneapolis; Lieber & Co., Harrison, N.Y.; Strong/Corneliuson Capital Management Inc., Milwaukee; and Northern Capital Management Inc., Madison, Wis.

Also, it hired Discount Corp. of New York Advisers as a fixed-income manager.

Southern dropped Bankers Trust Co., which was one of five balanced advisers, from its managerial line-up, but hired the bank as its master trustee.

It reduced the assignments of Citizens & Southern Investment Counseling, Atlanta; First National Bank of Atlanta; AmSouth Bank, Birmingham, Ala.; and Trusco Capital Management, Atlanta; all of which were balanced managers.

AmSouth was assigned an equity portfolio. First National was given a fixed-income account; its existing timber fund was unaffected. Trusco also was assigned a fixed-income portfolio, but was dropped as a real estate manager. Citizens & Southern retained only an existing real estate portfolio.

The changes left unaffected Southern's $50 million in guaranteed investment contracts with four insurers — Mu-

Continued on page 38

Charity fund execs best paid, study says

By Chuck Paustian

GREENWICH, Conn. — Investment executives at charitable institutions earn higher salaries than corporate and public pension executives, a new survey shows.

The average salary of corporate pension executives is $72,200 annually. In comparison, administrators of endowments, foundations and charitable associations receive an average of $77,700 and public fund officials, $44,900.

The study was conducted by the consulting and research firm Greenwich Associates. The data is based on personal interviews with fund executives at 1,064 corporations, 280 public funds and 110 endowments, foundations and associations.

"This is the most comprehensive (study) we have ever done," said Rodger F. Smith, partner of the Greenwich-based firm.

"Compensation differences between public fund officials and their counterparts at corporate funds and eleemosynary institutions are significant and cannot be explained by the size and importance of assets alone," Mr. Smith said.

"I think the public fund officials are responsible for very large (pools of) assets and their compensation is the lowest of the group."

There is little variance in the salaries of corporate plan executives based on plan size.

The highest paid corporate executives, those with plan assets between $50 million and $200 million, earn, on average, $72,800, only 1.8% more than $71,500, the lowest average salary paid to corporate executives, those with plan assets of less than $50 million.

The median salary for all corporate groups was $62,500.

The survey showed 13% of all the corporate executives interviewed earn annual salaries of more than $100,000.

In addition to their base salary, about half of the corporate officials interviewed receive an annual bonus, with 13% receiving a bonus of $20,000 or more each year.

In contrast, there is much more variation in the average annual salaries paid to executives of foundations, associations and endowments.

The officials of foundation funds earn the highest average salary, re-

Continued on page 35

SEI to buy Merrill unit, boost hold on consulting market

By Trudy Ring

WAYNE, Pa. — SEI Corp., parent company of SEI Funds Evaluation Services, is acquiring Merrill Lynch Consulting Group, reportedly for $6 million, sources said.

Neither SEI nor Merrill Lynch & Co. officials would comment on the acquisition, which could give SEI Funds Evaluation up to a 45% share of the pension fund consulting market.

The sources said SEI signed a letter of intent Dec. 11 to buy Merrill Lynch Consulting, after negotiations that began just about a month earlier. Details of the agreement are to be worked out by the end of the year. Officials at both companies would not confirm the deal, nor discuss the price or structure.

A letter informing both companies' clients of the sale went out in mid-December, sources said.

SEI Funds Evaluation already is the market leader in pension fund consulting, with about 1,500 retainer clients and a 37% market share. The acquisition of the Merrill Lynch group probably will increase those figures to about 2,400 and 45%, sources said.

There may be some overlap between the client bases, sources said, but the extent has not been determined.

The acquisition also will increase SEI's data base of tax-exempt portfolios to about 7,500 from 4,000, sources said.

The consulting groups offer similar services, including asset allocation, manager selection and performance evaluation. For certain clients coming over from Merrill Lynch, SEI will continue to produce the Investment Performance Analysis product that had been offered by Merrill Lynch, sources said.

One source said the product differs from other performance measurement systems in that it compares a money manager against others who use the same style, such as investment in small-capitalization stocks or undervalued stocks. The product has seven categories for managers, he said.

"It's the only thing that differentiated Merrill Lynch from anyone else," the source said. "I think it should complement SEI very well."

As part of the sale agreement, SEI will use Broadcourt Capital Corp., a Merrill Lynch subsidiary, to clear soft-dollar stock brokerage business, sources said. SEI has been using Pershing Division of Donaldson, Lufkin & Jenrette Securities Corp., New York.

Merrill Lynch reportedly is selling the consulting group because it doesn't fit in with its brokerage business. By selling the group, Merrill Lynch will get rid of the overhead that went with it, but retain the directed brokerage business it generated.

Merrill Lynch Consulting Group has about 70 employees; they will become part of SEI Funds Evaluation.

SEI Funds Evaluation has about 180 employees in production, planning and development and 100 in sales. The sales force includes those marketing SEI's other products, such as trust accounting and mutual funds, as well as consulting.

SEI Funds Evaluation accounts for about 20% of the parent company's personnel, 29% of its revenue and 45% of its profits. Comparable figures for Merrill Lynch Consulting Group were not available.

SEI Funds Evaluation once was A.G. Becker's funds evaluation group. SEI Corp. acquired the consulting business in October 1983. ■

NYC funds drop Favia, Hill

By Ed Christman

NEW YORK — Two New York City pension funds have terminated accounts totaling $2.65 billion with fixed-income manager Favia, Hill & Associates, a step that might precede a move to passive management by the funds.

The $9.6 billion New York City Teachers Retirement System moved its $2.4 billion account with the firm, and the roughly $419 million New York City Board of Education Retirement System pulled its $250 million portfolio.

Performance appeared to be the reason for the dismissal. According to a news release distributed by the city comptroller's office, "The systems took these actions because they believe the assets could be better deployed by another manager."

According to figures confirmed by Marvin Damsma, third deputy comptroller, Favia, Hill garnered a 21.4% return for the year ended June 30, and an annualized 10.1% for two years as of that date.

Meanwhile, a $371 million bond index fund run for the city retirement systems by Lehman Management Inc., New York, chalked up 33.1% for the year, and an annualized 13.9% for two years.

The dismissal was unrelated to the possible move to passive management.

The assets freed up by the termination of Favia, Hill were assigned temporarily to Citibank Investment Management, which already ran $6.1 billion in fixed-income assets for the New York City Employee Retirement Systems, bringing its total fixed-income assets under management for the city funds to $8.75 billion.

Citibank also serves as the master custodian for those funds.

Mr. Damsma said the assignment was temporary because the comptroller's office has begun to set up benchmark, or "normal," portfolios for each investment manager running assets for the five retirement systems overseen by the comptroller's office (*Pensions & Investment Age*, Sept.2).

The teachers' fixed-income assets, which total $6.4 billion, are run by the comptroller's office, which also oversees investment of the Board of Education fund. The teachers' board of trustees independently oversees the investments of the system's $2.6 billion Variable Annuity Plan "A," which is invested primarily in equities, and the $572 million Variable Annuity Plan "B," which is invested entirely in guaranteed investment contracts.

In addition, to the teachers' fixed-income portfolio and the Board of Education fund, the comptroller's office oversees the investment of the pension funds for city employees, police officers and firefighters.

Overall, the comptroller's office oversees $21.8 billion in employee benefit assets.

The benchmark portfolio concept, which is expected to be used within two months, can be characterized as an index fund for the investment style and market sector used by an investment manager.

It tries to capture the passive element of a manager's style, and thus allows pension funds to more accurately measure the performance of that style, rather than comparing it against market standards — such as the Standard & Poor's 500 stock index and Shearson Lehman Government/Corporate bond index — or against the performance of other managers.

This allows pension funds to get a better handle on managing the investment managers.

The benchmark portfolios also can provide plan executives with a detailed picture as to what the real asset allocation of a fund is by market sector in each asset class.

"The purpose of using benchmarks is to control and evaluate," Mr. Damsma said, noting it was being implemented for both equity and fixed-income investments. When in place, the procedure will provide information that will allow fund officials to decide if they want to take the entire fixed-income portfolio to passive management, he said.

When those decisions are made, fund officials will decide what to do with the assets Favia, Hill ran, he said. ■

Highlights

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BOSTON
470 Atlantic Avenue
Boston, MA 02210
(617) 542-0601
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Indexed assets up 70% in 1985

By Ed Christman

1985 was a banner year for index fund managers as indexed assets leaped almost 70% to approximately $81 billion, a *Pensions & Investment Age* telephone survey shows.

That figure was $33.3 billion more than the approximately $48.2 billion those managers claimed at the end of 1984.

The dramatic movement of pension fund assets into indexed products began 1984; it was fueled in 1985 by the relatively poor performances of active managers and the increasing use of indexed funds as a way of dealing with a growing asset base.

Of the $81 billion in indexed assets, approximately $70 billion is in equity products and $11 billion in fixed-income products.

In explaining index management's rise to prominence, marketers generally noted 70% of active managers have underperformed benchmark indexes.

One index fund marketer, who asked not to be identified, went so far as to characterize index managers as "vultures, waiting to pick business off the carcasses of active managers, and there are plenty of carcasses lying around."

Past surveys by *P&I Age* have shown indexed assets run by money managers to have grown to their current levels from $9 billion in 1980.

Wells Fargo Investment Advisors, San Francisco, and Bankers Trust-Investment Management Group, New York, enjoyed explosive growth in 1985. Wells Fargo more than doubled indexed assets under management to $29 billion, of which $24 billion was for equity products, $2.5 billion was for fixed-income products and $2.6 billion for specialized indexing. Bankers Trust's indexed assets jumped to $20 billion from $13 billion, 95% of which was for equity products and the remainder for fixed income.

Indexed assets probably exceed the $100 billion mark when pension funds' internally managed assets are included.

For example, the Teachers Insurance & Annuity Association — College Retirement Equities Fund, the largest pension fund in the nation, has $12.5 billion in internally indexed equities. Many other large pension funds manage some indexed assets in-house.

Moreover, the telephone survey revealed a growing attraction by pension executives with fixed-income index products. That attraction might have been spurred by executives' experiences with dedications and immunizations, other forms of passive fixed-income management that have proven very popular in recent years.

The five leading fixed-income managers in the telephone survey are Mellon Bank, with $3.7 billion; Wells Fargo, $3.5 billion; State Street Bank & Trust Co., $1.2 billion; Bankers Trust, $1 billion; American National Bank, $800 million; and Lehman Management Co., $604.9 million.

Although indexed fixed-income assets are far below indexed equity assets, it is only in the past five years that the Shearson Lehman Government/Corporate bond index has come to be accepted as the standard, pointed out David R. Hardin, vice president and director of fixed-income services for RepublicBank, Dallas. RepublicBank is in the index fund market with a Standard & Poor's 500 stock index product that has $150 million under management, and a bond index product, with $45 million under management. The bank plans to add two more bond products in 1986.

Officials in the New York City controller's office, which oversees $21.8 billion in assets, are considering indexing the fund's entire fixed-income portfolio, almost $15 billion. If that occurs, New York might be in the vanguard of a new fixed-income philosophy.

The past year has seen a number of other large pension funds, particularly public, turning to index management.

Officials of the California State Teachers' fund are planning on indexing 65% of its approximately $15 billion in pension assets.

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Indexed assets . . .

Continued from page 6

Many large funds are turning to index products because in their attempt to diversify they wind up mirroring the index anyway, said Lawrence S. Harris, senior vice president and director at Alliance Capital Management, New York.

Index managers expect those large pension funds to continue increasing their indexed assets, although many agree that growth probably won't be as explosive as it has been.

Other pension funds reported to have embraced an index vehicle in the past year are Teamsters, Central States, Southeast and Southwest Areas Pension Fund, Chicago, which indexed more than $1.7 billion in equity assets; Eaton Corp., Cleveland, which expanded its indexed equity assets to more than $100 million; and Chicago Policemen's Annuity and Benefit Fund, which placed $65 million in a fixed-income index fund.

Also putting assets into indexed accounts, the Florida State Board of Administration, Tallahassee; the Kentucky Retirement System, Frankfort; the Illinois Municipal Retirement Fund, Chicago; the Retirement Systems of Alabama, Montgomery; the Maryland State Retirement & Pension Systems, Baltimore; and the Utah State Retirement Fund, Salt Lake City.

Public pension fund officials seem to be more disposed to indexing assets because the performance results of the fund are often used as a "political football," explained one index manager, who did not wish to be identified.

He said the party in power doesn't get credit when funds achieve good returns, but is attacked when the returns are poor. Under those circumstances, "it makes sense for officials to index," he said.

However, not all growth has come directly from pension fund executives. Batterymarch Financial Management, Boston, a pioneer of index management, got out of the business this year, freeing up the approximately $1 billion it managed in index funds.

Alan J. Strassman, executive vice president, explained Batterymarch's move by saying, "The thrill was gone. We have nothing new to bring to the product," which has become a commodity.

Mr. Strassman said another factor involved in the decision was the low fees indexing brings in.

The bulk of indexed equity assets are in "plain vanilla" S&P 500 funds, but plan executives are developing a taste for different products.

Among the twists offered to meet those tastes are funds tilted by market sector, fundamental or quantitative data and economic and timing considerations. Other index products include options overrides or funds based on financial futures; South Africa-free index funds; small-stock funds; international index funds; and timed funds, which shift between types of securities depending on the markets. ■

Top 20 index fund managers*

Rank	1985 total	1985 equity total	1985 fixed income total	1984 total
1. Wells Fargo Investment Group	29,100	25,600	3,500	14,000
2. Bankers Trust Investment Mgmt. Group	20,000	19,000	1,000	13,000
3. Mellon Capital Management	8,200	7,750	450	4,400
4. American National Bank & Trust	7,500	6,700	800	5,000
5. Mellon Bank[1]	4,500	1,250	3,250	3,900[2]
6. State Street Bank & Trust	2,360	1,100	1,260	1,600
7. Dimensional Fund Advisors	2,100	2,100	0	1,600
8. Manufacturers National Bank of Detroit	2,000	2,000	0	1,600
9. Wilshire Associates Management	1,800	1,900	0	1,500
10. Chase Investors Management	1,250	1,250	0	955
11. Alliance Capital Management	750	750	0	99
12. Harris Trust & Savings	713	713	0	600
13. Northern Trust Co.	645	645	0	50
14. Lehman Management Co.	605	0	605	454
15. Prudential Asset Management	510	460	50	197
16. Great American Core Investors	200	200	0	85
17. Centerre Trust Co.	196	196	0	143
18. RepublicBank Trust/Dallas	195	150	45	NA
19. Metropolitan Life Insurance Co.	175	175	0	87
20. T. Rowe Price	100	0	100	NA

*Ranked by 1985 data as of Nov. 30.

[1]Mellon Bank's total does not include approximately $500 million in commitments and $150 million committed to a synthetic cash product, invested when conditions warrent.

[2]*P&I Age* estimate.

Congressional . . .

Continued from page 16

and a premium hike became more and more desperate as its deficit for the single-employer insurance program topped $1 billion in 1985. The agency picked up record claims from plan terminations by Allis-Chalmers Corp. and Wheeling-Pittsburgh Steel Corp., whose plans were underfunded by $160 million and $440 million, respectively.

However, an impasse on resolving the differences jeopardized the bill's future. The scrapping of the bill was averted as Rep. Rostenkowski agreed to recede to the House labor committee measure.

Some experts, including PBGC chief Kathleen Utgoff, think the long-term solution for the system is shifting to a risk-related premium — one based on the likelihood of an employer's terminating an underfunded plan.

An agency-commissioned study on that issue is awaiting release, but is likely to stir up a hornets' nest.

What may emerge as the hottest issue in 1986 is the long-brewing question of whether employers should be able to terminate overfunded pension plans to recover surplus assets.

The right to retrieve the excess assets has the support of the administration, but the winds are shifting. Support is mounting in Congress to curb reversions, and more substantive bills than the nine-month moratoriums unsuccessfully sought by Sen. Howard Metzenbaum, D-Ohio, and Rep. Edward Roybal, D-Calif., may be developed.

Eventually, asset reversions will be prohibited, predicted Richard Fay, a pension lawyer with Reed Smith Shaw & McClay, Washington.

Defensive moves by employer groups are "a rear-guard action. It's Napoleon trying to get out of Moscow alive," he said.

In particular, the fact employers stand to recover nearly $9.5 billion from terminations of plans overfunded by $1 million since 1980 has added fuel to the fire. United Air Lines Inc.'s pending $962 million reversion, and the wave of terminations used to either avert a takeover or provide the financing in the aftermath of one, may spur legislators on.

In addition, there is a growing consensus in the administration that its guidelines on asset reversions were just a step to deal with an immediate problem: how to allow employers to terminate their plans and stay within the defined benefit plan universe.

The real issue, officials have said, is not whether employers should be allowed to recapture surplus assets, but whether companies must terminate their plans to do so. Proposals allowing employers to borrow or withdraw all or part of their plans' surplus assets may receive increased attention in 1986.

Also emerging on the congressional front are a series of proposals that would toughen the Employee Retirement Income Security Act.

A bill proposed by Sen. John Heinz, R-Pa., and Rep. William Clay, D-Mo., would impose a five-year minimum vesting requirement, tougher integration and coverage rules, tightened distribution rules and improved portability.

The risk, some say, is that the differences between a mandated pension system, such as Social Security, and the voluntary private pension system is being blurred. ERISA's requirements, seen as radical proposals 11 years ago, now are viewed as "inadequate," Mr. Fay said.

Other issues developing in 1986 may include:

- the unfunded levels for retiree health insurance, estimated between $100 billion and $200 billion;
- a gradual move toward incentive-based compensation for money managers, following the Securities and Exchange Commission's historic decision to allow the fees;
- increased attention to pension issues by top Labor Department officials, following Secretary William Brock's elevation of the pension program's top spot to assistant secretary from administrator, and a boost in the agency's status within the department;
- the expected issuance of a definition of plan assets by the Labor Department by midyear;
- increased attention to corporate governance issues, on the heels of the Council of Institutional Investors' wide exposure in meetings with Unocal Corp., arbitrageurs, the SEC and others; and
- continued focus on pension fund investment performance when the Labor Department issues an outside study commissioned on the subject. ■

HIGHLIGHTS OF SPECIAL SECTIONS, REPORTS & DIRECTORIES

ISSUE DATE	AD CLOSING DATE	REAL ESTATE	CORPORATE FINANCE	CASH MANAGEMENT	INTERNATIONAL	FUTURES & OPTIONS	PENSIONS & INVESTMENTS PERFORMANCE EVALUATION REPORT	
JAN 6	DEC 20*	●	●	●				**Investment Banking Report/Survey:** Annual Report on the leading investment banking firms for 1985.
JAN 20	JAN 8	1,000 LARGEST PENSIONS FUNDS						P&I Age's annual ranking of the largest pension funds. Details on asset size, mix, managers.
FEB 3	JAN 22	●	●	●		●		**Money Mover Scorecard:** Annual review of asset management shifts and trends among institutional investors in 1985.
FEB 17	FEB 5*	●	●	●	●		Annual	**P.I.P.E.R. Annual:** Pensions & Investments Performance Evaluation Annual Report.
MAR 3	FEB 19	●	●	●				**Computers for Corporate Financial Management:** An update on computer products available to corporate finance and fund managers.
MAR 17	MAR 5	●	●	●		–		**Profile of 50 Largest Issuers/Survey:** P&I Age identifies the largest issuers in various segments of the market and looks at how capital is being raised.
MAR 31	MAR 19	●	●	●		●		**Directory of Financial Organizations and Associations:** P&I Age takes a look at associations and organizations involved in treasury and investment management functions.
APR 14	APR 2	●	●	●	●			**Leasing:** An editorial update on leasing as a corporate financing tool–what's being leased, the money it's saving.
APR 28	APR 16	●	●	●			1st Quarter	**P.I.P.E.R. First Quarter:** Pensions & Investments Performance Evaluation Report–First Quarter results.
MAY 12	APR 30	●	●	●		●		**Mutual Funds:** P&I Age focuses on the use of mutual funds in various kinds of employee benefit plans—from pension to profit sharing plans.
MAY 19	APR 21*	DIRECTORY OF INVESTMENT ADVISERS						An in-depth look at the managers of America's wealth-total assets, asset mix, rankings.

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Pensions & Investment Age

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California PERS takes $1 billion in-house

By Steve Hemmerick

SACRAMENTO, Calif. — The California Public Employees' Retirement System is pulling $1 billion in-house to invest in the stocks of small and medium-sized companies, an area of the market in which the $30 billion pension fund has been seriously underweighted.

The $1 billion will come mostly from cash and contributions. The remainder will be taken from existing managers, but which ones hasn't been decided yet, said Greta Marshall, investment officer.

Until now, equity assets have been managed externally by Citicorp, New York, as the active manager, and Bankers Trust, New York, as the passive manager. Both managers are being retained.

Pulling $1 billion in-house is only one of a series of planned strategic moves aimed at improving the investment return on its $8.5 billion equity portfolio, Ms. Marshall said.

A key part in improving the system's equity return, she said, is the long-term investment strategy now being developed.

Its equity pool has become so large, she said, that strategies appropriate for a smaller fund — such as having a number of very small specialty managers managing small amounts of money — won't work for a $30 billion system that keeps growing.

Ms. Marshall said she wants five to 10 external managers, coupled with large in-house active and passive equity pools. She and her staff have begun work, she said, on developing computer models to actively manage large in-house equity pools that will buy undervalued securities and will sell overvalued ones.

She said she has run such in-house pools before at Deere & Co., where she was manager-finance and investments. The in-house pools, she said, matched or beat many of the externally managed assets.

The overall strategy now includes dipping into smaller stocks, where the system hasn't been before, and using new active and passive investment styles, where the performance of one style will be matched against another.

Consequently, the retirement system's large pool of equity assets will be broken up into many smaller pools as the system prepares a strategy for the long term and increases its equity allocation to $12 billion from the current $8.5 billion.

It will be the first time the system has managed equity assets in-house, although it has always managed fixed-income and cash investments internally.

Under previous state law, the system was required to keep custody and perform executions concerning the assets, but the equity assets were regarded as being externally managed, said Ms. Marshall.

(In a move already under way, fund officials are negotiating with six new external equity managers (*Pensions & Investment Age*, Dec. 23) that will receive a total of between $600 million and $3 billion.)

The ultimate size of the actively managed in-house equity pools hasn't been decided. Ms. Marshall said she plans to "beef up" her in-house staff to help manage the money. The passively managed in-house pools, she said, will be relatively easy to manage.

Where appropriate, all the different kinds of approaches to managing equity money — the active external, active internal, passive internal and passive external asset pools — will be matched against each other. If the actively managed assets, over the long term, can't beat the passive equity pools, all equity assets for the system could become passive, said Ms. Marshall.

(In mid-1985, the employees' companion fund, the $15 billion California State Teachers' Retirement System, announced plans to switch from mostly active to 50% to 67% passive management in the next three years. Tom Flanigan, the fund's chief investment officer, said the move was due to the fund's size.)

Because of the huge amounts of assets it holds, the California Public Employees' Retirement System has limitations in movement that smaller funds don't have. Since California law was changed last year, there is no problem with holding large pools, as core holdings, of stocks from small and medium-sized companies.

Part of the reason for the shift to small and

Continued on page 31

Avon goes to passive portfolios

By Richard J. Gillespie

NEW YORK — In a continuing move toward passive management, Avon Products Inc. has switched $35 million from three equity portfolios into a stock index fund and about $65 million from two fixed-income portfolios into a dedicated portfolio.

One equity manager and two fixed-income managers were dropped in the changes.

Elio Parroni, group manager-employee benefit funds, said plan executives hope to increase returns by lowering commissions costs and management fees.

"Most years, the median manager has not equaled the index returns in both equities and bonds, and that is before fees are taken out. If you take out fees, it has been even worse," he said.

The Avon $415.3 million defined benefit plan, which is heavily funded on a termination basis, now has an equity exposure of 60%, which excludes 3% in real estate equity.

On the fixed-income side, the plan's entire 16% bond exposure was concentrated into a dedicated fund set up for retired lives and is to be duration-managed by J.P. Morgan Investment Management.

The plan's bond portfolios had been actively managed by Centerre Trust Co. of St. Louis and Fayez

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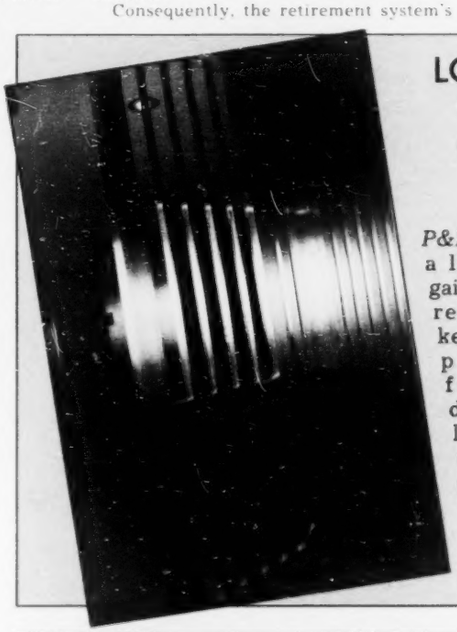

LOCKING UP GAINS

P&I Age takes a look at the gains made in recent markets and what pension funds are doing to lock up those gains, on page 3.

Late news

FASB statement out

STAMFORD, Conn. — The Financial Accounting Standards Board issued a statement detailing the accounting treatment to be used when pension plans have been terminated.

Statement 88 is closely related to No. 87, which for the first time requires general pension fund liabilities be shown on the balance sheet

(*see story page 8*).

Under Statement 88, previously deferred gains or losses are to be recognized in earnings when a pension obligation is settled. A settlement is defined by the FASB as "any irrevocable action that relieves the employer of primary responsibility for a pension obligation and eliminates significant risks related to the obligation and the assets used to effect that settlement."

Until now, a corporation entering into an asset reversion involving the termination of one plan and establishment of another was not permitted to recognize immediately any gain in earnings.

Under Statement 88, a loss is recognized in earnings when a curtailment is probable and its effects can be reasonably estimated. A gain is to be recognized in earnings when

Continued on page 36

Southwestern Bell invests overseas

By Rose Darby

ST. LOUIS — Southwestern Bell Corp., with $4.5 billion in employee benefit assets, marked the end of 1985 by allocating $140 million to four international equity managers, said Roger Wohlert, assistant treasurer-corporate finance.

Southwestern Bell's move means only two of the seven regional Bell operating company pension funds — NYNEX Corp., New York, and BellSouth Corp., Atlanta — have no international investment capabilities. NYNEX officials, however, are said to be screening international managers.

The four Southwestern Bell choices are: Fidelity International Investment Advisors and Putnam International Advisors, both of Boston; IDS International Inc., Minneapolis; and Nomura Capital Management, New York.

Fidelity will manage $50 million, and Putnam and IDS, $30 million each, in international equities, said Mr. Wohlert. Nomura will receive $30 million to make equity investments with a Pacific Basin orientation, he said.

Mr. Wohlert said Southwestern Bell officials do not plan additional international investments.

Among earlier moves by the Bell companies after they were spun off from American Telephone & Telegraph Co.:

• Pacific Telesis Group, San Francisco, hired five international equity managers between late 1984 and the first half of 1985 to invest about 5% of the $5.4 billion pension fund. They are ABD International Management Corp., New York; Fidelity International; Morgan Grenfell Investment Services Ltd., London; N.M. Rothschild International Asset Management Ltd., London; and Capital Guardian Trust Co., Los Angeles.

PacTel officials have said their target for foreign investment is 10% to 15%.

• American Information Technologies Corp., Chicago, hired four international managers in mid-1985. They are: ABD International; IDS International; Capital Guardian; and Baring International In-

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TI portfolio 'synthetic'

Junk bonds bought

By Barry B. Burr

DALLAS — Texas Instruments Inc. has put $10 million into a "junk bond" portfolio that, along with buying the low-rated, high-yield debt securities, sells short actual Treasury securities, according to William L. Green, manager-pension fund investments.

Ed S. Schriver, vice president, Southmark Pension Advisors Inc., Dallas, who runs the Texas Instruments portfolio, calls it "a synthetic junk bond fund."

So far, the fund's returns are mixed, as measured against bond indexes, although Mr. Schriver pointed out its objective isn't to beat the indexes.

For the quarter ended Sept. 30 (TI's first investment period with the fund), the fund returned a non-annualized 3.3%, he said.

(By comparison, in the same pe-

Continued on page 31

Allis-Chalmers, PBGC sued over termination

By Trudy Ring

WASHINGTON – Six participants in an underfunded Allis-Chalmers Corp. pension plan have sued the company and the Pension Benefit Guaranty Corp. for allegedly violating ERISA in terminating the plan.

The suit, filed Dec. 20 in U.S. District Court here, alleges the July 26 termination of the plan violated the terms of the plan's governing documents. Under the Employee Retirement Income Security Act, pension plans are obliged to conform to their own governing documents, said David Levin, the Washington attorney representing the plaintiffs.

Mr. Levin said this probably is the first post-termination suit to name the PBGC as a defendant, although the agency has been sued by persons trying to block terminations.

The plaintiffs seek more than $50 million in pension plan contributions, punitive damages and benefits lost as a result of the termination. They also seek restoration of the plan and removal of the PBGC as its trustee.

Officials of Allis-Chalmers and the PBGC declined comment on the suit.

The plan, covering hourly employees represented by the United Auto Workers union, was underfunded by about $165 million (*Pensions & Investment Age*, July 22). The Milwaukee company left other retirement plans intact.

According to the complaint, the Allis-Chalmers plan documents obligated the company to take no action to terminate the UAW plan until Jan. 31, 1986. By terminating the plan before that, Allis-Chalmers reduced its funding obligations significantly, the suit alleges. The company was obligated to make its 1984 plan year contribution of $15.6 million by Sept. 15, 1985, and more than $10 million for the 1985 and 1986 plan years combined.

The suit alleges that by terminating the plan in July and retaining the $15.6 million that was supposed to have been contributed by September, Allis-Chalmers knowingly used the plan assets in its own interest and for its own account, therefore causing the retirement plan to engage in transactions prohibited by ERISA.

The complaint further alleges that because of the July termination, three of the plaintiffs, Jim Buese, Ruth Glick and Barnett Aughinbaugh, suffered a reduction in pension benefits, and Ms. Glick was denied the right to immediate benefits.

It also alleges the other plaintiffs, Tom Pfizenmaier, Edward Acker and Richard Kirchhoff, were denied the right to receive any benefits. Each would have become vested had the plan continued through January.

The PBGC is named in the suit because the plaintiffs allege the agency was aware of the requirements of the plan documents and took no action to stop the termination.

"What we're saying is they didn't have to take it (the claim) and they took it," Mr. Levin said.

The plaintiffs seek to have Allis-Chalmers pay the pension fund all contributions for 1984, 1985 and the applicable portion of 1986, plus interest, and to have the company and the PBGC compensate the plaintiffs and all other plan participants for benefits lost because of the termination.

Also, they ask the court to award punitive damages of $30 million against Allis-Chalmers and the PBGC.

They further seek restoration of the plan, effective retroactively to July 26, and removal of Allis-Chalmers as administrator and the PBGC as trustee. They also seek to enjoin Allis-Chalmers and the PBGC from acting to terminate this plan or any other retirement plan in violation of the governing documents.

No court date has yet been set. ■

Venture firms gain investors

By Trudy Ring

Several tax-exempt funds have made commitments to two venture capital partnerships — one focusing on health care and electronics, one on high technology.

Lawrence Venture Associates, with offices in New York and Nashville, Tenn., has drawn pension fund investors that include Sterling Drug Inc., New York; Federal Express Corp., Memphis, Tenn.; the Wisconsin State Board of Investment, Madison; and the Iowa Public Employees' Retirement System, Des Moines.

The Wisconsin board also committed assets to the Venture Capital Fund of New England, Boston. Among that pool's other tax-exempt investors are Landmark Charitable Foundation, Norfolk, Va., and endowment funds, including Babson College, Wellesley, Mass., and Boston University.

Also, Manufacturers Hanover Investment Corp., New York, has agreed to make commitments to both the Lawrence and New England pools on behalf of a pension fund client.

Wisconsin made a third commitment to Nazem & Co., New York, but information on the fund's other investors could not be obtained by press time.

Lawrence Venture Associates, concentrating on health care and electronics, recently had an initial closing with $28 million, about half of that from pension funds, said Larry Lawrence, managing partner.

The initial closing was to initiate the fund formally, but it will continue to take on investors, with a final closing planned for early 1986, Mr. Lawrence said. Its target is $60 million.

The fund was the recipient of the Sterling Drug pension fund's first venture capital commitment. Pension officials wanted to diversify the $200 million fund further, a Sterling Drug spokesman said. He declined to say how much the fund invested.

The Sterling Drug pension committee's decision to invest in the Lawrence partnership came easily because of the focus on health care, according to the spokesman: "We said, 'Let's do something that we know something about.'"

He said the pension committee will consider recommendations on other venture capital investments in 1986. These will be outside the medical area, the spokesman said.

Federal Express' commitment to the Lawrence fund was its second for venture capital, said Jeffrey O. Drinan, senior manager-trust investments. The company, which has about $175 million in pension and profit-sharing funds, made its first venture capital commitment in February, Mr. Drinan declined to say how much the fund invested.

He said the Lawrence fund was attractive because of the emphasis on health care and the experience of the partners. Mr. Lawrence formerly was president of Citicorp's venture capital division (which gave Federal Express some of its start-up funding).

The $10.8 billion Wisconsin investment board committed $5 million to the Lawrence partnership, said Ronald Niedziela, investment director-special equity. The board is in its second round of venture capital commitments; it invested in four partnerships last fall, after receiving legislative approval to do so. Mr. Niedziela said he probably will make further recommendations on venture investments to the board in January.

He said the board was attracted to the Lawrence fund because of the partners' track record and its focus on health care.

The Iowa retirement system agreed to invest up to $5 million, or 10% of the total raised by the partnership, in Lawrence Venture Associates (*Pensions & Investment Age*, Dec. 9). Another corporate pension fund reportedly invested in the partnership, but officials could not be reached for comment.

Also, Manufacturers Hanover Investment Corp. put $2 million into the fund on behalf of a pension fund client, said Raymond L. Held, senior vice president and director, venture capital group. He declined to identify the client.

Mr. Lawrence said the fund will put capital into young companies during the next four or

Continued on page 35

Balanced manager also hired

Tampa dedicates bond portfolio

Ed Christman

TAMPA, Fla. — The $123 million City of Tampa General Employees Retirement Fund has become one of about a half dozen public pension funds to establish a dedicated bond portfolio.

Prudential Asset Management Co., Newark, N.J., set up the $38 million portfolio and MH Investment Counsel, Atlanta, was hired to manage the portfolio.

In a separate move, Tampa trustees hired balanced manager Leavy Investment Management, Atlanta, to run $10 million. The money was taken from Courier Capital Corp., Buffalo, N.Y., which retains $10 million.

To fund the dedication, Investment Counsel Co., Orlando, Fla., a fixed-income manager that ran $25 million, was terminated, Cinda Huntley, chairwoman of the pension fund, said the remainder of the assets came from Courier, Thorndike, Doran, Paine & Lewis, Atlanta, which still retains $50 million; and from uninvested assets. She would not elaborate.

The Tampa dedication, which was set up to cover the liabilities of all workers retired before March 1985, locks up a 10.69% return for 30 years, Ms. Huntley said.

Ms. Huntley said the biggest percentage of the dedicated portfolio is in government bonds, followed by guaranteed investment contracts with Prudential.

She said the dedication would save the fund about $600,000 a year in contributions. That money probably will not be used to increase benefits, she said.

In addition, it allows the fund to raise its actuarial rate of return to 8% from 6.5%.

"I wanted to use a dedication because I wanted some more stability . . . as opposed to the big ups and downs of the equity market," Ms. Huntley said. "I wanted something I could be more comfortable with that didn't fluctuate so much."

The Tampa fund used James J. Lowrey & Co., New York, to take bids. The fund gave 11 bid criteria, including securities with at least an AAA rating from Standard & Poor's Co. and GICs rated as good as or better than Best's Insurance Report's A rating. Best's Insurance Report is published by A.M. Best Co., Oldwick, N.J.

"The bid had to lock up the highest rate of return with the least risk," Ms. Huntley said. "The higher the bid, the less we had to take out of" other portfolios, she said.

Had the dedication been done when officials first started talking about it in November 1984, "we could have gotten 15% and done it for $25 million or $26 million," Ms. Huntley said.

"Still, (the dedication) looks good," considering where interests rates are now. ■

Hutton is top story of '85

By Nancy K. Webman

The E.F. Hutton & Co. Inc. cash management scandal was the most important capital markets institutional investing story of 1985, a survey by *Pensions & Investment Age* shows.

The survey questionnaire was published in the Nov. 25 issue of *P&I Age*. Readers were asked to rank order, from among 22 choices, the five most significant stories in the pension investment, corporate finance and cash management fields.

Interestingly, each of the Top Five stories of 1985 also is expected to grab headlines during 1986 as well.

In the Hutton case, settled out of court, company Chairman Robert Fomon on May 2 pleaded the New York firm guilty to 2,000 charges of wire and mail fraud in connection with the firm's cash management practices. Hutton had been accused by the U.S. Department of Justice with carrying out a complex check kiting scheme in which it systematically overdrew hundreds of its accounts across the country between July 1, 1980 and Feb. 29, 1982.

Fallout from the Hutton affair continued long after the settlement. Various governmental and regulatory bodies still are scrutinizing the cash management procedures of corporations, brokerage firms and banks.

The second most significant story of the year was the $9.45 billion in surplus assets reclaimed by corporations that terminated overfunded pension plans during the past five years.

Among the largest terminations of overfunded plans in 1985: United Air Lines, Chicago, which is getting back more than $962 million; FMC Corp., Chicago, which will recapture between $250 million and $400 million; and Union Carbide Corp., New York, whose $500 million surplus may be used by GAF Corp. in its attempted takeover of Carbide.

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1985 underwriting rankings
(Full credit to lead manager)

Salomon Bros. dominates list of underwriters

NEW YORK — Salomon Brothers Inc. continued to be the strongest investment banking firm overall in 1985, leading the underwriting rankings for U.S. issuers in both the U.S. and European markets.

Salomon's dominance came in a year of large and innovative financings, both domestically and internationally.

Domestically, corporate financings surged to $138.5 billion from $82.7 billion in 1984, according to IDD Information Services. Domestic straight debt issues surged about 49% to $97.7 billion from $65.2 billion in 1984; common stock issues almost tripled to $24.8 billion from $8.9 billion as the stock market soared.

Worldwide, U.S. issuers raised $167.8 billion, including $35.7 billion in the Euromarket, while all issuers raised $270.8 billion.

The surging markets produced innovation in the form of asset-backed financings, including securities backed by receivables and securities backed by commercial real estate, and new classes of stock and new kinds of variable rate notes.

Salomon's strength showed in almost all areas of the market.

On a full credit to lead manager basis, Salomon Brothers ranked first in the U.S. market with 22.3% of all debt and equity issues, ahead of The First Boston Corp., 15.6%, and Goldman, Sachs & Co., 11.8%, the IDD Information Services figures showed.

On a bonus credit to lead manager basis, Salomon had 18.9% of the market, First Boston, 14.5%, and Merrill Lynch Capital Markets, 11.8%.

In the Eurobond market, Salomon had a 15.1% market share on a full credit to lead manager basis, followed by First Boston, 14.4%, and Goldman, Sachs, 11.3%.

On a bonus credit basis, however, First Boston took first with a 13.3% share followed by Salomon, 12.5%, and Merrill Lynch, 8.8%.

For all issues by U.S. issuers on a worldwide basis, Saloman Brothers was again top on a full credit to lead manager basis, with 20.3% of the market. It was again followed by First Boston, with 15.2%, and Goldman, Sachs, with 11.8%. On a bonus credit to lead manager basis, Salomon's leading market share was 17.4%, followed by First Boston, 14.3%, and Merrill Lynch's, 11%.

First Boston/Credit Suisse topped Salomon in the worldwide rankings for all issuers and all issues, with a 15.1% market share on a full credit to lead manager basis, and a 13.5% share on a bonus credit basis. Salomon was second with a full credit market share of 14.3% and a bonus credit market share of 12.4%. Merrill Lynch Capital Markets was third under both methods.

Salomon again led in terms of U.S. straight debt issues on a full credit basis, with a 26.6% market share (22% on a bonus credit method), followed again by First Boston, 18.6% on a full credit basis and 17.3% on a bonus credit method.

Salomon was second to Drexel Burnham Lambert Inc. in junk bond financing; third behind Goldman, Sachs and Merrill Lynch Capital Markets in common stock financing; second to Shearson Lehman Brothers Inc. in straight preferred stock issues; and first in mortgage-related debt.

Salomon's overwhelming strength was shown by being lead underwriter for eight of the Top 10 deals of the year, including a $998 million bond issue for Atlantic Richfield Co. in July; an $896 million bond issue for Canada, also in July; a $795 million debenture issue for Chrysler Corp. in November; and an $824 million participating certificate deal for the Federal Home Loan Mortgage Corp. in December.

The company's underwriting strength was shown in July when it came to market with more than $3 billion of deals in one week — as much as other firms do in one quarter.

Salomon also did some of the biggest stock issues of the year, including a $415 million secondary offering of Phibro-Salomon Inc. shares by Minerals & Resources Corp., and a $406 million offering by Beatrice Companies Inc. Building on General Motors Corp.'s successful use last year of class stock in the acquisition of Electronic Data Systems, Salomon developed Class H stock for GM's purchase of Hughes Aircraft Co.

Along with First Boston, Salomon led the way in the development of securitized receivables, bringing out CARs (certificates for automobile receivables) for Marine Midland Bank.

Salomon also played a role in the evolution of the European Currency Unit market, underwriting in the U.S. market a $150 million floating-rate note deal convertible into ECU for Credit National, a French financial institution.

Salomon's only weaknesses were foreign issues by non-U.S. corporations; convertibles, where it ranked eighth; initial public offerings, fifth; and convertible preferred offerings, sixth.

First Boston and Goldman, Sachs each could claim to be the second strongest firm overall. First Boston led only in the worldwide, all issuers, all issues ranking but ranked second in four other categories on a full credit to lead manager basis — U.S. market all issues, Euromarket, straight debt and mortgage-related debt.

Goldman, Sachs ranked first in common stock issues, initial public offerings and convertible preferred issues, and third in the U.S. market combined debt and equity offerings, third in the Euromarket offerings and third in straight debt offerings, all on a full credit to lead manager basis.

First Boston was one of the first in the receivables-backed financing market, underwriting an issue for Valley National Bank early in the year, then stepping into the market again in December with a $525 million auto loan-backed security issue for General Motors Acceptance Corp. — the largest of its kind to date.

In April, First Boston underwrote the first ECU offering in the United States for a U.S. issuer, a $33 million deal for Hercules Inc. The deal signaled the beginning of a broad-based currency market in the United States. Later in the year, First Boston did a yen-based offering in the United States for the Asian Development Bank.

First Boston underwrote two of the Top 10 common stock issues for the year — a $353 million offering by Pacific Telesis Group, and a $350 million secondary offering of Becton Dickinson & Co. stock by the Sun Co. The sale of the stock by Sun ended a legal battle between Becton and Sun that began in the mid-1970s when Sun tried to take over Becton.

Continued on page 6

All Issues

U.S. market

	Firm	$ mil.	issues
1.	Salomon Brothers	30,899.4	293
2.	First Boston	21,573.3	274
3.	Goldman, Sachs	16,365.1	145
4.	Merrill Lynch	15,575.9	189
5.	Drexel Burnham	13,336.7	171
6.	Morgan Stanley	10,050.1	104
7.	Shearson Lehman	9,639.0	164
8.	Kidder, Peabody	3,829.1	83
9.	PaineWebber	2,920.5	74
10.	Smith Barney	1,639.0	37
11.	Dean Witter	1,422.8	33
12.	Dillon, Read	1,352.8	12
13.	Prudential-Bache	1,346.8	41
14.	Bear, Stearns	1,320.4	30
15.	E.F. Hutton	955.6	24

Euromarket*

	Firm	$ mil.	issues
1	Salomon Brothers	5,396.0	43
2	First Boston†	5,154.1	46
3.	Goldman, Sachs	4,049.4	29
4.	Morgan Stanley	3,015.9	21
5.	Merrill Lynch	2,817.1	15
6.	Union Bank/Switz.	2,590.7	15
7.	Morgan Guaranty	1,874.4	21
8.	Nomura Securities	1,401.6	12
9.	Banque Paribas	1,159.1	12
10.	Daiwa Securities	1,079.3	10
11.	Shearson Lehman	832.3	8
12.	Swiss Bank	699.4	6
13.	Bank of America	443.6	2
14.	S.G. Warburg	441.8	3
15.	Orion Royal Bank	420.6	10

Worldwide**

	Firm	$ mil.	issues
1.	First Boston†	40,705.5	376
2.	Salomon Brothers	38,742.5	360
3.	Merrill Lynch	23,470.5	236
4.	Goldman, Sachs	21,725.3	185
5.	Morgan Stanley	16,570.2	167
6.	Drexel Burnham	13,411.7	172
7.	Shearson Lehman	12,131.6	180
8.	Deutsche Bank	7,608.8	73
9.	Morgan Guaranty	7,382.3	61
10.	Nomura Securities	5,097.8	62
11.	Kidder, Peabody	4,261.5	88
12.	Union Bank/Switz.	3,785.2	27
13.	Banque Paribas	3,351.1	55
14.	Daiwa Securities	2,968.2	37
15.	Orion Royal Bank	2,942.9	51

Bond Issues

Straight debt

	Firm	$ mil.	issues
1.	Salomon Brothers	25,969.1	234
2.	First Boston	18,185.3	231
3.	Goldman, Sachs	11,253.5	94
4.	Merrill Lynch	10,083.7	102
5.	Drexel Burnham	10,039.9	106
6.	Morgan Stanley	6,937.1	61
7.	Shearson Lehman	5,283.5	99
8.	Kidder, Peabody	2,034.4	41
9.	PaineWebber	1,919.2	41
10.	Dillon, Read	1,004.3	7
11.	Smith Barney	950.7	17
12.	Prudential-Bache	811.1	16
13.	Dean Witter	697.4	14
14.	Bear, Stearns	597.3	11
15.	E.F. Hutton	341.1	5

Convertible debt

	Firm	$ mil.	issues
1.	Merrill Lynch	1,390.8	19
2.	Drexel Burnham	1,185.3	21
3.	First Boston	850.0	11
4.	Goldman, Sachs	615.0	7
5.	Shearson Lehman	530.0	8
6.	Kidder, Peabody	355.0	11
7.	Bear, Stearns	330.0	6
8.	Salomon Brothers	295.0	4
9.	E.F. Hutton	277.0	5
10.	L.F. Rothschild	265.0	5
11.	Lazard Freres	225.0	2
12.	Morgan Stanley	210.0	5
13.	Smith Barney	199.0	4
14.	Dillon, Read	141.8	1
15.	Wertheim	75.0	1

Junk bonds

	Firm	$ mil.	issues
1.	Drexel Burnham	9,184.1	98
2.	Salomon Brothers	1,606.0	15
3.	Morgan Stanley	1,239.2	16
4.	Merrill Lynch	1,108.0	20
5.	Shearson Lehman	953.5	12
6.	Goldman, Sachs	862.0	9
7.	First Boston	814.4	13
8.	E.F. Hutton	554.5	7
9.	Bear, Stearns	518.9	12
10.	Prudential-Bache	471.0	9
11.	Kidder, Peabody	355.0	10
12.	L.F. Rothschild	353.3	7
13.	Smith Barney	302.4	8
14.	Lazard Freres	125.0	1
15.	Allen	90.0	2

Stock Issues

Common stock

	Firm	$ mil.	issues
1.	Goldman, Sachs	3,461.5	35
2.	Merrill Lynch	3,294.8	59
3.	Salomon Brothers	3,240.3	34
4.	Morgan Stanley	2,118.0	27
5.	First Boston	1,896.0	22
6.	Shearson Lehman	1,777.9	27
7.	Kidder, Peabody	1,394.7	30
8.	Drexel Burnham	1,308.0	38
9.	PaineWebber	671.6	26
10.	Dean Witter	584.1	15
11.	Bear, Stearns	393.0	13
12.	Smith Barney	389.3	15
13.	L.F. Rothschild	318.2	18
14.	Alex. Brown	314.3	17
15.	E.F. Hutton	313.5	13

Straight preferred

	Firm	$ mil.	issues
1.	Shearson Lehman	1,987.5	28
2.	Salomon Brothers	1,285.0	19
3.	Merrill Lynch	701.0	7
4.	Morgan Stanley	555.0	9
5.	First Boston	550.0	7
6.	Drexel Burnham	498.6	3
7.	Goldman, Sachs	260.0	4
8.	Prudential-Bache	161.1	2
9.	Smith Barney	100.0	1
10.	Dean Witter	50.0	1
11.	PaineWebber	50.0	1
12.	Kidder, Peabody	45.0	1
13.	Oppenheimer	30.0	1
14.	Meuse, Rinker	25.0	1
15.	Keane Securities	4.8	1

Convertible preferred

	Firm	$ mil.	issues
1.	Goldman, Sachs	775.0	5
2.	Drexel Burnham	305.0	3
3.	PaineWebber	279.8	6
4.	Morgan Stanley	230.0	2
5.	Lazard Freres	130.0	1
6.	Salomon Brothers	110.0	2
7.	Merrill Lynch	105.8	2
8.	First Boston	92.0	3
9.	Dean Witter	91.3	3
10.	Shearson Lehman	60.0	2
11.	Alex. Brown	40.0	1
12.	E.F. Hutton	24.0	1
13.	Ryan, Beck	13.8	1
14.	Prudential-Bache	13.0	1
15.	Piper, Jaffray	11.0	1

* U.S. issuers only/ Also, excludes non-European issued securities, such as Samurai bonds.

** All issuers. Excludes non-European issued securities, such as Samurai bonds.

† Includes Credit Suisse

Source: IDD Information Services

Salomon dominates . . .

Salomon Brothers

Market	Rank '85	Rank '84
U.S market	1	1
Euromarket	1	NA
Worldwide	2	NA
Straight debt	1	1
Convertibles	8	6
Junk bonds	2	NA
Mortgage debt	1	NA
Common stock	3	5
IPOs	5	NA
Straight pref.	2	6
Convertible pref.	6	4

First Boston

Market	Rank '85	Rank '84
U.S market	2	3
Euromarket	2	NA
Worldwide	1	NA
Straight debt	2	3
Convertibles	3	2
Junk bonds	7	NA
Mortgage debt	2	NA
Common stock	5	8
IPOs	14	4
Straight pref.	5	4
Convertible pref.	8	2

Goldman, Sachs

Market	Rank '85	Rank '84
U.S market	3	5
Euromarket	3	NA
Worldwide	4	NA
Straight debt	3	5
Convertibles	4	3
Junk bonds	6	NA
Mortgage debt	9	NA
Common stock	1	2
IPOs	1	6
Straight pref.	7	1
Convertible pref.	1	1

Continued from page 4

While First Boston trailed Salomon in total mortgage-related debt issues, it led Salomon in collateralized mortgage obligations, with a 38.5% market share compared with 30.2% for Salomon. Between them, these two have divided the CMO market, with third place going to Merrill Lynch, with 8.1%.

Goldman, Sachs led the field in common stock issues during the year, with a 14% market share on a full credit basis, followed by Merrill Lynch and Salomon Brothers.

Goldman underwrote the second largest common stock offering, the $750 million Rockefeller Center Properties offering.

Goldman also led the field in initial public offerings with a 19.9% market share, followed by Merrill Lynch Capital Markets, 15%, Shearson Lehman, 13%, and Kidder Peabody & Co. Inc., 6.4%.

It also led in convertible preferred issues with a 33.3% share on a full credit basis, well ahead of Drexel Burnham, with 13.1%.

Goldman also underwrote some of the largest debt offerings during the year, including a $598.5 million notes offering for Philip Morris Inc. in December, a $300 million sinking fund debenture issue for Procter & Gamble Co. in November, and a $300 million note issue for Citibank.

Merrill Lynch Capital Markets was the top underwriter of convertible debt for the year, with an 18.7% market share on a full credit basis, followed by Drexel Burnham, 16% and First Boston, 11.4%.

Merrill Lynch was second in common stock underwriting and in initial public offerings and third in straight preferred stock.

The company's capital markets group came out with zero-coupon convertibles early in the year for Waste Management Inc. and raised $100 million for the company.

Merrill Lynch Capital Markets also honed in on the medium-term note area during the year. It set up a $500 million medium-term note facility backed up by mortgages for California Federal Savings & Loan Association. The facility is like a shelf registration in that it is an ongoing program with CalFed issuing increments of the total as it sees fit.

Shearson Lehman was the top underwriter of straight preferred stock during the year with almost one-third of the market on a full credit basis, followed by Salomon, 20.4%, and Merrill Lynch Capital Markets, 11.1%.

The firm led in this area because of its emphasis on money market preferred stocks, which have their interest rates set every 49 days via an auction or investor bids.

Shearson also came out with money market notes, which work along similar lines, and exchangeable money market preferred. The latter are not only re-marketed every 49 days, but also can convert at the option of the issuer to money market notes after two years.

The first issue of exchangeable money market preferreds came out in mid-December, with a $75 million offering for Household Finance Corp. with an initial yield of 6.25%. This was followed by a $150 million two-tranche deal for American International Group at a 6% initial yield.

Shearson also was lead manager for the $824 million Fireman's Fund initial public offering, the largest IPO of the year. The deal lifted Shearson to third in the IPO underwriting rankings. Without it, the firm would have ranked fifth. It also improved Shearson's common stock ranking to sixth from eighth.

Drexel Burnham, as expected, led the way in junk bond financing, with 47.9% of the market on a full credit basis. Its nearest competitor was Salomon Brothers, 8.4%.

Drexel also ranked second in convertible debt to Merrill Lynch Capital Markets and second in convertible preferreds to Goldman, Sachs.

The firm did the largest single financing of the year, a $1.2 billion senior note issue in November for SCI Holdings, the shell corporation for the Storer Communications Inc. buyout.

It also raised $500 million in the public markets for Wickes Co. to raise money for its acquisition of several Gulf & Western Industries' divisions.

Drexel also underwrote a $572 million subordinated notes and debentures issue for Pantry Pride in July; a $398 million subordinated notes and debentures issue for Harte-Hanks Communications; and a $398.5 million issue for Philadelphia Electric, both in November.

Although it still had almost 50% of the junk bond market, Drexel's market share has slipped dramatically from last year, when it had almost 75% of the market it pioneered.

One other interesting deal underwritten by Drexel was a $146 million public offering of 15-year participating first mortgage bonds. These kinds of deals had been done only in private markets before, but a growing need for financing by commercial real estate developers is expected to take to public markets in greater numbers in the future.

Among the financing innovations of the year was Morgan Stanley's JETS (joint extendable term securities) for People Express Airlines. The carrier issued $125 million of the notes, which investors can put back to the company after five years, or they can buy, at par, an equal amount of the notes carrying the same terms.

Also, Monsanto Co. and Dart & Kraft Financial Corp. both issued Eurobonds with debt warrants through Morgan Stanley International. Monsanto's was a five-year offering, while Dart & Kraft's was for 10 years. The two issues involved bonds that can be called before maturity along with warrants to buy similar but non-callable bonds. ■

Shearson Lehman Brothers

Market	Rank '85	Rank '84
U.S market	7	6
Euromarket	11	NA
Worldwide	7	NA
Straight debt	7	6
Convertibles	5	1
Junk bonds	5	NA
Mortgage debt	3	NA
Common stock	6	3
IPOs	3	3
Straight pref.	1	2
Convertible pref.	10	NA

Merrill Lynch

Market	Rank '85	Rank '84
U.S market	4	4
Euromarket	5	NA
Worldwide	3	NA
Straight debt	4	4
Convertibles	1	4
Junk bonds	4	NA
Mortgage debt	4	NA
Common stock	2	4
IPOs	2	2
Straight pref.	3	3
Convertible pref.	7	NA

Drexel Burnham Lambert

Market	Rank '85	Rank '84
U.S market	5	2
Euromarket	NA	NA
Worldwide	6	NA
Straight debt	5	2
Convertibles	2	5
Junk bonds	1	NA
Mortgage debt	6	NA
Common stock	8	9
IPOs	6	5
Straight pref.	6	7
Convertible pref.	2	NA

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INVESTMENT COMPANY INSTITUTE

SEI, Merrill clients applaud acquisition

By Trudy Ring

SEI Corp.'s acquisition of the Merrill Lynch Consulting Group will have a positive effect, according to interviews with pension-fund clients of both firms.

SEI of Wayne, Pa., agreed in principle Dec. 11 to acquire Merrill Lynch Consulting of New York; the price, according to sources, was $6 million. The acquisition will make SEI the nation's largest pension fund consulting firm by far, with a 45% market share and about 2,400 clients.

"I was very pleased with the acquisition," said John Gallhue Jr., executive director of the Boston-based Massachusetts Bay Transportation Authority pension fund, an SEI client. "It's a plus for SEI, and it'll be a plus for their clients."

Mr. Gallahue said one positive aspect of the purchase agreement is that SEI now will direct its soft-dollar business through Merrill Lynch's Broadcourt Capital Corp. SEI had been directing trading through Pershing Division of Donaldson, Lufkin & Jenrette.

"To be directing through Merrill Lynch is going to be much easier to do than it was through Pershing," he said.

Other SEI clients said they were pleased that the acquisition will increase the firm's data base. "Our feeling is it's probably an advantage to expand the data base from over 4,500 to over 7,500 (tax-exempt portfolios)," said Robert Steele, trust and investment officer of the University of Idaho endowment fund, Moscow. The larger data base will give the internally managed fund's executives a better idea of how they are doing, he said.

Mark Koenig, manager of investments for Internorth Inc., Omaha, Neb., added, "To the extent that it adds other funds to the data base, it's to our advantage."

Messrs. Steele and Koenig both said the new soft-dollar arrangements will not affect their funds; they pay their fees in hard dollars.

Merrill Lynch Consulting clients also had generally favorable comments. One corporate pension fund executive, who asked not to be identified, said he has been happy with Merrill Lynch's service and price. "But I think SEI is perhaps a more client-oriented performance service, and although I think the price may go up, I'm pleased," he said.

Ray Clardy, finance director in Jacksonville, Fla., said the city has used Merrill Lynch as consultant for one municipal pension fund and SEI for another. He said he doesn't know if SEI now will become consultant for both funds, or if city pension officials will make a change.

"Merrill Lynch, in the past, has served us well," he said. "I kind of hate to see them go. But both firms have served us well, so I don't know what we're going to do." ■

Pensions & Investment Age

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Defined Contribution Assets SOAR

INSIDE: Top 1,000 pension funds

Wesley Medical sets incentive fees for managers

By Chuck Paustian

WICHITA, Kan. — The $220 million Wesley Medical Endowment Foundation has hired four equity managers under an incentive fee arrangement it intends to make later with two new fixed-income managers as well.

The hirings represent the first incentive fee arrangement for the six new managers as well as the fund's two existing managers.

The Wesley Medical Endowment Foundation is among the first funds to adopt performance-based fees since the Securities and Exchange Commission approved the use in November of performance-based fees for institutional investors. However, the Department of Labor has yet to approve the practice, instead choosing to review incentive fees on a case-by-case basis for funds subject to the Employee Retirement Income Security Act (*Pensions & Investment Age*, Nov. 25). Endowments, foundations and public funds are not subject to ERISA.

Lawrence E. Davanzo, vice president of Wilshire Associates, Santa Monica, Calif., Wesley's consultant, said the four new equity managers are: Aronson & Fogler, Philadelphia; Westwood Management Corp., New York; Northern Capital Management Inc., Madison, Wis.; and Cramblit & Carney Inc., Los Angeles.

The two fixed-income managers hired were: Bradford & Marzec Inc., Los Angeles; and Investment Advisers Inc., Minneapolis.

Duane Dyer, president of the foundation, said the fund's two existing managers, First National Bank in Wichita, for equities, and Fourth National Bank & Trust Co., Wichita, for fixed-income, were allocated additional assets and will manage the entire accounts on an incentive-fee basis.

The eight managers received a total of $210 million, although Mr. Davanzo declined to release the amounts allocated to each.

The money came from the sale of the Wesley Medical Center to Hospital Corp. of America, Nashville, for more than the $210 million.

Wilshire was hired by the foundation on a retainer basis to find managers for the new assets. Wilshire is the fund's first consultant.

"All of the managers were selected to offer protection in market declines," said Mr. Davanzo.

Mr. Davanzo said the managers are under an asymmetrical fulcrum fee arrangement, meaning a manager's fee could go down more than it could go up.

Prior to the SEC ruling in November, only symmetrical fulcrum fees, tied to an appropriate, generally recognized index, were permissible.

Under a symmetrical fulcrum fee arrangement, the manager's fee increases or decreases in equal increments based on his performance in comparison with his stated objective. For example, for every 100 basis points above or below the stated objective, the manager's fee would increase or decrease 10%.

With asymmetrical fulcrum fees, the amount the fee can increase or decrease are not equal.

Under the incentive-fee arrangements, the managers are guaranteed a base fee, a discount from their standard fee, said Mr. Davanzo.

"(The equity managers) earn their normal fee only when their return is equal to their performance objective. If they only equal the market, or fall below it, they only receive the base fee," he said.

"We establish the guidelines with each manager and set up the base fee with each manager." He would not discuss specific fees.

The managers could earn more than their normal fee if they surpass their performance objective, although a maximum fee is established with each manager.

Because of time constraints, an incentive-fee arrangement could not be made with the bond managers as they were hired, he said.

"Bond management fees are lower than equity management fees so you have less of an incentive to pursue it," he said.

The managers' willingness to accept a performance-based fee schedule was not a criterion for inclusion in the manager search, but was in the final presentation.

Since the SEC approval, Mr. Davanzo said, he has implemented incentive-fee arrangements with three other funds — all non-corporate ones — he would not name.

One fund with performance-based fees is the $1.3 billion Rockefeller Foundation, New York, said Jack Meyer, treasurer and chief investment officer. Nine of the foundation's 10 managers are on incentive fees, including: Geewax, Terker & Co., King of Prussia, Pa.; Rosenberg Capital Management, San Francisco; and Warburg, Pincus Counsellors Inc., New York.

"We are very much in favor of fulcrum symmetrical fees," said Mr. Meyer. "We are

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The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* December indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	4.9	31.8	31.8
Russell 3000[1]	4.4	32.1	32.1
Ryan Index[2]	3.7	24.1	24.1
SLAE Gov't./Corp.[2]	3.1	21.3	21.3

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

Funds may force bankruptcy

By Steve Hemmerick

An Alabama public pension fund executive, fearing a loss of part of $24.2 million in debt his two funds hold on a troubled insurance concern, says it was his fiduciary obligation to try to force the company into Chapter 11 bankruptcy.

David Bronner, secretary-treasurer of the Teachers' Retirement System of Alabama and The Employees' Retirement System of Alabama, said the funds filed a petition Jan. 7 to force Mission Insurance Group Inc., Los Angeles, into Chapter 11 proceedings. Other plaintiffs were Martin J. Whitman, trustee of M.J. Whitman & Co. Inc. pension plan, and Carl Marks & Co., an investment banking firm in New York.

The action was designed to give the retirement systems and the two other plaintiffs priority on claims against Mission. Mr. Bronner said he was forced into action after Mission missed its Dec. 1, semiannual payment to his pension funds on $3.5 million in 9% sinking fund debentures due 2002.

On Jan. 15, after the suit was filed, Mission defaulted again. This time, the company didn't make an estimated $1.2 million payment on the $20.7 million worth of 11⅞ notes (due 1993) held by the Alabama funds.

The four plaintiffs hold a total of 46% of the $50 million issue of 11⅞ notes and 17% of the $21 million issue of 9% sinking fund debentures.

If granted, the petition would create a "major obstacle" in a proposed rescue plan for Mission, according to Joseph A. Morton, California deputy insurance commissioner and chief of conservation and liquidation. The petition is scheduled to be heard late this month in federal bankruptcy court in Los Angeles.

If the rescue plan falls through, the state of California likely will proceed with liquidation, according to state officials. Last August, the California Insurance Department office found Mission insolvent by $169.5 million.

The rescue plan can't go forward without the consent of Mission's debtholders, including the retirement funds, because the plan involves an exchange of debt.

With the pension funds playing such a key role in the rescue plan, Mr. Bronner said he doesn't understand why Mission didn't try to contact him. He said he didn't hear "one peep" from Mission officials to explain why they missed the payment.

Also, he said, he first learned of Mission's proposed restructuring plan from newspaper stories.

Mission officials couldn't be reached to answer questions. In public announcements, however, the company stated that because of the restructuring, Mission's outstanding public issue of debentures may receive new issues of debt of "lower principal amount." It also stated holders of Mission's obligations may be asked to modify or waive certain covenants in their existing issues.

Mission officials wouldn't say, and Mr. Bronner said he didn't know, how much less in principal amount debtholders might be asked to accept. But the belief that he would accept such conditions unilaterally is "absurd," Mr. Bronner said.

"In this exchange offer, they want us (the Alabama retirement systems and other debtors) to take our securities and trade them in for some lesser grade of securities," said James P. Heffernan, an attorney for the retirement systems and a member of the law firm Anderson, Russell, Kill & Olick, New York.

"They basically would like us to take all the hurt here. We are not prepared to do that. If there is going to be a haircut given in this case, it is going to be taken by the shareholders, not by us," he said.

Typically, he said, any company would rather do such a reorganization through an exchange offer "because chances are all your bondholders won't be organized. You pick them off one at a time."

But, he added, this case isn't typical, and others in the future won't be when there is a large, sophisticated pension fund involved.

"In this case, you have bondholders already organized, and you have got two bondholders (the Alabama systems) that control almost 40% of it. They intend to negotiate just as tough as they can."

Mission and its five subsidiaries are primarily involved in worker compensation insurance, but the insurance group ran into trouble with its reinsurance underwriting. Reinsurance is a way insurance companies share risk among them-

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Kaiser staff quits; outside firms hired

By Rose Darby

OAKLAND, Calif. — Kaiser Aluminum & Chemical Corp.'s pension plan has shifted to completely external investment management because its pension investment staff resigned.

"We're doing everything outside," said Norman L. van Patten, director of pension fund management. "Basically, now we'll be doing administrative management and focusing on asset allocation (internally)," he added.

Kaiser has moved about $275 million, or the remaining 59% of its $470 million in pension assets, to three outside fixed-income managers and two equity index funds, Mr. van Patten said.

Wentworth, Hauser & Violich, San Francisco, and The Putnam Advisory Co. Inc., Boston, each received $40 million for fixed income.

Fixed-income manager Wilmington Trust Co., Wilmington, Del. was given an initial allocation of $115 million, of which $50 million to $60 million will be used for benefit payments to retirees during the year.

The Wilmington account will not be a cash management account, but it will hold either all Treasury bills or five-year bonds "so that it's very liquid and has many aspects of a short-term investment fund, but with a higher return," said Mr. van Patten.

About $35 million of private placement bond funds will remain unaffected by the changes, with Equitable Life Assurance Society of the United States, New York, he added.

Early in the second half of 1985, Kaiser's pension committee decided to allocate roughly $80 million in internally managed equities into two equity index funds, Mr. van Patten said.

Those assets are divided equally between Mellon Capital Management Corp., San Francisco, and Wells Fargo Investment Advisors, San Francisco, he said.

The moves began when James Todhunter Jr., former director of pension fund management, left to start his own investment management firm in conjunction with brokers Swergold, Chefitz, Sinsabaugh Inc., New York. The new firm, Todhunter/SCS Inc., is in San Francisco.

Mr. van Patten became Kaiser's director of pension fund management early in the second quarter of 1985. He has been with Kaiser for 30 years, the past 12 years as assistant treasurer.

E. Monty Lee, the former manager-pension fund investment, left to join the California Public Employees' Retirement System, said Mr. van Patten.

The other two portfolio professionals joined other investment firms, he added. ■

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W. Teamsters trustees settle

Defined benefit plan to stay

By Steve Hemmerick

SEATTLE — Plans to convert the $5.9 billion Western Conference of Teamsters Pension Trust Fund to a defined contribution plan have been scrapped, said Joseph Ballew, co-chairman of the trust.

Some of the 14 members of the board of trustees had wanted to switch from a defined benefit plan to either a defined contribution or hybrid plan.

Meanwhile, efforts are under way to streamline some aspects of the trust, to make it less complicated, more attractive to employers and more competitive in today's environment, he said.

Mr. Ballew did not spell out how this streamlining would be accomplished, saying the topic was still under discussion among plan trustees. But he did say the plan is 97% funded, and "extremely healthy."

In addition, a number of money managers, both active and passive, are being considered for hiring by the trust. Prudential Asset Management Co., Newark, N.J., the sole manager, would be retained, Mr. Ballew said.

And despite rumors to the contrary, Mr. Ballew said there will be no dismantling of the $2.2 billion of trust assets that had been put in a dedicated bond portfolio last year.

(The dedication reportedly was to be broken up to help prevent the move away from a defined benefit plan.)

Trustees appointed by employers and unions had extensive discussions about converting the plan, Mr. Ballew acknowledged. As a result of the discussions and studies of the trust, the management trustees dropped a lawsuit they had filed against union trustees (*Pensions & Investment Age*, May 13).

The trust is a multiemployer pension plan, with trustees evenly divided between labor and management.

Mr. Ballew, who is a union representative, said employer and employee trustees have settled their differences.

"We are spending a heck of a lot of time doing analysis and projections with A.S. Hansen" of Lake Bluff, Ill., the trust's consultant, he said.

Owen Bennett, co-chairman of the trust and an employer representative, said trustees had reached an agreement, but he still has hope of some "variations" of the defined benefit plan. He would not elaborate.

Mr. Ballew also said participants in the pension trust had been given a 25% increase in benefits, and he described that increase as a major victory for participants.

At least part of the money for the increase came as a result of the dedication of assets. Following the asset dedication, an actuarial refiguring showed the plan had several hundred million additional dollars.

At first, several of trustees planned to pay off the fund's entire liability and establish a hybrid plan that would have had at least some of the aspects of a defined contribution plan.

But other trustees objected, saying the plan had a very small unfunded liability and assets resulting from the dedication should be used to give plan participants a benefit increase.

Trustees were sharply divided; the legal action followed. Employer-appointed trustees accused union ones of trying to expand the plan's unfunded liability and hurt the long-term solvency of the plan. They asked a judge to restrain the union trustees from making changes in the plan.

Trustees would only say the suit was settled when an agreement was reached, but they wouldn't detail aspects of the settlement, in part, they said, because actions outlined in the agreement are still being worked out.

Mr. Ballew said one of the reasons he and some other trustees objected to a defined contribution plan was a study showing that participants who retired for the next 12 years would take home more benefits under the defined benefit plans than under the proposed defined contribution plan.

He also said the defined benefit plan would be much less likely to be hurt under any tax reform proposal.

Speaking in general terms, Mr. Bennett said he would like to see benefits more closely relate to contributions, as is true in a defined contribution plan.

Trustees wouldn't say whether they would consider establishing side-by-side plans, a defined benefit plan and a defined contribution plan.

While total conversion to a defined contribution plan is "rare" among multiemployer plans, side-by-side plans have become somewhat popular, according to Martin Levenson, a senior vice president with Segal Advisors Inc., New York, which does consulting work for many multiemployer plans.

Having an annuity or defined contribution plan, where assets are locked up and liabilities non-existent, alongside a defined benefit plan, said Mr. Levenson, "relieves them of the withdrawal liability situation."

Some employers are afraid to join multiemployer trusts for fear of being saddled with some of the trust's past unfunded liability.

Mr. Levenson said that rarely happens, and the withdrawal liability issue is usually more of a psychological problem than an actual one. ■

Debt deals in trouble?

By Barry B. Burr

With a number of recent proposed junk bond financings having trouble getting commitments, Wall Street observers are divided on whether the problems are peculiar to these deals or are a sign of a souring in the market for the highly leveraged debt securities.

Proposed takeovers involving MGM/UA Entertainment Inc., R.H. Macy & Co. and Trans World Airlines Inc., among others, haven't been able to raise financing.

At the same time, a trend isn't clear. Other recent deals have been consummated and financed in large part with the low-rated, high-yield securities.

Kohlberg Kravis Roberts & Co., one of the largest leveraged buy-out firms, faced disparate reactions to a couple of its recent deals.

In a junk deal underwritten by Drexel Burnham Lambert Inc., SCI Holdings Inc. sold the largest bond offering of 1985 in December as part of KKR's financing for its buy-out of Storer Communications Inc.

More recently, though, Kohlberg Kravis Roberts lowered its bid for Beatrice Cos., offering less cash, trying to complete the takeover.

The incomplete takeovers indicate junk bond deals were already having trouble attracting financing even before the recent Federal Reserve Board's limitation on the use of the highly leverage debt.

The deals still are pending despite the involvement of some of the shrewdest and most experienced individuals and firms involved in takeovers, including Drexel, the leading junk bond investment banker.

Because of trouble raising financing, Carl C. Icahn downgraded his offer for TWA. The management group seeking Macy cut its bid to ease financing requirements.

> *"There are certainly enough examples to say there is trouble in 'junk bond city.' That's the impression we've drawn."*
> — William H. Gross, Pacific Investment

The new Fed margin rule on junk bonds, narrower than initially proposed, apparently won't affect many of the deals; it exempts, among other cases, situations where there is a merger agreement between acquiring and target companies.

Several money managers specializing in investing in the low-rated debt securities dismissed suggestion that problems with some deals are a market refutal of junk bonds in general.

In fact, Talton R. Embry, president of Magten Asset Management, New York, thinks recent market rejection to some deals "is very positive."

"Not every transaction that is proposed should be financed," he said.

"People like to make good loans, even junk bond participants.

"With TWA, Icahn wanted to withdraw more money than he put into it. If he doesn't want to put up his money, why should I? He hasn't been able to finance the transaction as he wanted to."

Other recent junk deals have gotten commitments, he said, showing the junk bond market is still thriving. He cited Storer's bond sale and noted GAF Corp. had lined up financing commitments for its now-abandoned proposed takeover of Union Carbide Corp.

"The market is willing to look at each transaction and take transactions they feel are reasonable," he added.

Mr. Talton said troubles lie with particular issues, not in the junk bond market in general.

Gary T. Crum, senior vice president, AIM Management Inc., Houston, agreed.

"The high-yield market is not a homogeneous market," he said.

"I don't think there is a general souring in the high-yield area. I would think it's the contrary; it's a problem of the particular deals."

But William H. Gross, managing director, Pacific Investment Man-

Continued on page 98

Most new accounts

Firm	New accounts 1985	1985 rank	New accounts 4th qtr.	4th qtr. rank
The Boston Co.	17	1	4	5
Bankers Trust Co.	15	2	4	5
Mellon Capital Mgmt. Corp.	13	3	2	*
Trinity Investment Mgmt.	12	4	1	*
State Street Bank	12	5	6	2

* not ranked in top 5
tied for this category
Source: *Pensions & Investment Age*

4th-quarter shifts decide hot firms

By Trudy Ring

Moves by large public pension funds toward the end of the year accounted for some of the biggest shifts of assets in the fourth quarter and the 12 months of 1985.

As a result, Citicorp Investment Management, New York, and Investment Advisers Inc., Minneapolis, were among the advisory firms that had the most new assets under management reported for the quarter and the year.

Also, index funds continued to attract large amounts of assets, with three leading index fund managers placing in the Top 10, as measured by new assets under management, in both the year and quarter. The three are Mellon Capital Management Corp. and Wells Fargo Investment Advisors, both of San Francisco, and Bankers Trust Co. — Investment Management Group, New York.

(Managers who gained the most assets and most new accounts were identified through money movers and other articles in *Pensions & Investment Age*. Current accounts, a cross-reference to manager hirings, is published quarterly and begins on page 84 of this issue.

(Some managers may have gained or lost accounts that were not reported in the publication. Scorecard, a *P&I Age* survey of managers' accounts gained or lost during 1985, will be published Feb. 3.)

Citicorp had $2.65 billion in new assets under management reported in 1985, all in the fourth quarter. This made the firm the winner for both the quarter and the year. The money came from fixed-income portfolios that the $9.6 billion New York City Teachers Retirement System and the $419 million New York City Board of Education Retirement System shifted from Favia, Hill & Associates, New York.

However, assignment of the portfolio to Citicorp is temporary, because the New York City comptroller's office is setting new standards for investment managers running the assets of five city retirement systems. When that process is complete, fund officials will decide what to do with the assets pulled from Favia, Hill.

Investment Advisers was second for the quarter, with nearly $1.2 billion in new assets. It was fifth for the year.

The bulk of the new assets assigned to Investment Advisers came from the West Virginia Board of Investments, which chose the Minneapolis firm as sole adviser for the $1.15 billion in combined assets of the Public Employees' Retirement System and the Workers' Compensation Trust Fund.

Investment Advisers will run the money entirely in fixed income, using an active strategy. The firm replaces Loomis, Sayles & Co. Inc., Boston, as adviser of the $644 million employees' system and Scudder, Stevens & Clark, Boston, as adviser of the $501 million workers' compensation trust.

Mellon Capital was second for the year, with $1.94 billion in new assets under management. Of this, Mellon gained $365 million in the fourth quarter, placing the firm sixth for that period. New accounts in the quarter were a $200 million multinational stock index fund for the Teamsters, Central States, Southeast & Southwest Areas pension fund, Chicago, and a $165 million balanced account for the New York City Teachers' Variable Fund.

Mellon already was managing $800 million in stock index funds for the Central States Teamsters. This account was reported during the first quarter. Other large accounts reported for Mellon in the first three quarters included a bond index fund for the I.A.M. National Pension Fund, Washington, in which it split $800 million with three other managers, and a $200 million stock index fund for the pension fund of U S WEST Inc., Englewood, Colo.

Mellon also was third in new accounts reported for the full year, with 13.

Bankers Trust's investment man-

Continued on page 98

Most assets gained
($ millions)

Firm	New assets 1985	1985 rank	New assets 4th qtr.	4th qtr. rank
Citicorp Investment Mgmt.	2,650	1	2,650	1
Mellon Capital Mgmt. Corp.	1,940	2	365	6
Bankers Trust Co.	1,435	3	535	3
Wells Fargo Investment	1,368	4	135	*
Investment Advisers Inc.	1,214	5	1,186	2
J.P. Morgan Investment	986	6	356	7
Duff & Phelps Investment	878	7	400	5
Kohlberg Kravis Roberts	525	8	525	4
Richard Ellis Inc.	500	9	0	*
Neuberger & Berman	379	10	156	10

* not ranked
Source: *Pensions & Investment Age*

Profiles: The top 200

Benefit payments top contributions

By Trudy Ring

Benefit payments by many large corporate pension funds outstripped contributions in 1985, as funding of defined benefit plans remained healthy and companies encouraged early retirement.

Data provided by 48 large corporate funds showed contributions of $6.1 billion and benefit payments of $6.9 billion in 1985. Their contributions were down 4.7% from 1984's $6.4 billion, while their benefit payments were up 15% from $6 billion.

The 48 were chosen because they were among the nation's 200 largest pension funds in both 1984 and 1985 and gave *Pensions & Investment Age* figures for contributions and benefits for both years.

However, at some companies benefit payments have been exceeding pension fund contributions for several years. Last year, a *P&I Age* survey of 69 corporate and union funds found benefit payments for 1984 were $305 million more than contributions. That survey included some, but not all, of the 48 funds for which 1985 data were obtained.

In many cases, companies decreased or curtailed contributions to defined benefit plans because the plans have neared or reached full funding. For instance, Exxon Corp., New York, was able to decrease its contribution 74%, to $113 million in 1985 from $437 million in 1984, because its plan is so well-funded.

Phillips Petroleum Co., Bartlesville, Okla., made no contribution to its defined benefit plan in 1985 because the plan is overfunded. (Phillips has not contributed to the plan since 1982.) The company did contribute $25 million to its combined 401(k) and thrift plans.

Generally, if there was an increase in contributions, it was to defined contribution plans.

"Defined benefit plan contributions are going down," said Gary Pines, a consultant with the actuarial firm of Towers, Perrin, Forster & Crosby, Chicago. "I haven't seen one go up this past year."

At the same time, he said, defined contribution plans are gaining dollars. Employees find 401(k) plans appealing, for instance, because of the opportunity to earn a tax-deferred return on pretax dollars, while getting a matching contribution from employers, he said.

Changes in actuarial assumptions also allowed some corporations to decrease their pension fund contributions. E.I. du Pont de Nemours & Co. Inc., Wilmington, Del., cut contributions 31%, to $269 million in 1985 from $390 million in 1984, because it raised its actuarial assumption to 9% from 7.5%.

Also, TRW Inc., Cleveland, reduced its contributions 29%, to $71 million from $100 million, and raised its actuarial assumption to 10% from 8.5% to better reflect investment gains.

David Vaughn, senior consultant with The Wyatt Co., Chicago, said good investment performance has been a key factor in many contribution reductions. Also, new Financial Accounting Standards Board guidelines call for actuarial assumptions that reflect current market conditions, leading companies to raise assumptions.

A few companies bucked the trend, increasing contributions significantly. For instance, Chrysler Corp., Detroit, increased contributions 25%, to $570 million in 1985 from $456 million in 1984, largely because of a new labor contract.

But such companies definitely were in the minority.

Several corporate plans saw increases in benefit payments because of early retirement programs.

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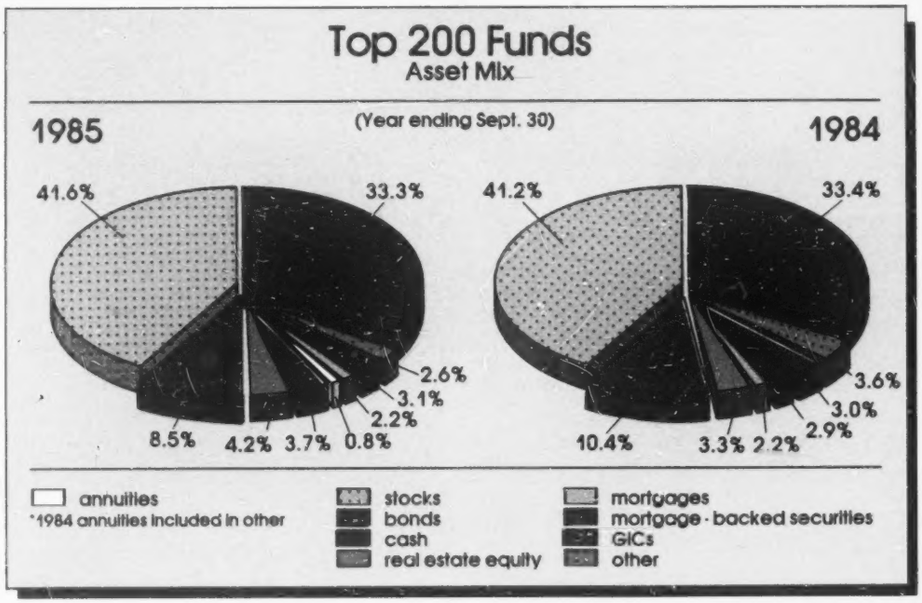

Mergers cited as pension funds fall from listing of 200 largest

By Alan Krauss

Corporate mergers and divestitures were the single largest factor accounting for disappearances from *Pensions & Investment Age*'s ranking of the 200 largest U.S. employee benefit funds.

Of eight funds that were dropped from the latest list, two were absorbed by acquiring companies and one divested several subsidiaries.

Corporate mergers might cause at least four more funds, including two in this year's Top 100, to vanish from next year's compilation.

The largest fund absorbed as a result of a corporate merger was Gulf Oil Corp., Pittsburgh, which was ranked 76th as of Sept. 30, 1984, with $2.2 billion in employee benefit assets. Gulf was acquired by Chevron Corp., San Francisco. As a result, Chevron jumped to 33rd on the new list, from 60th a year ago. Chevron had $6 billion in assets as of Sept. 30, 1985, compared with $3 billion a year earlier.

Chevron officials said they are continuing to run the Gulf master trust separately.

The Signal Companies, La Jolla, Calif., ranked 114th as of Sept. 30, 1984, was acquired last year by Allied Corp., Morristown, N.J. The merged conglomerate, Allied-Signal Inc., became the 34th largest pension fund as of Sept. 30, 1985, with $6 billion in assets.

However, Allied-Signal is destined to move down in the rankings when it completes the spinoff of 28 operating units into a new company that will take approximately $1 billion in pension assets with it.

Greyhound Corp., Phoenix, Ariz., dropped to 355th as of Sept. 30 from 179th a year ago. Its employee benefits assets shrank by $416 million as a result of 14 corporate divestitures in four years.

The largest of the divestitures was Armour Food Co., which resulted in a drop in employee benefit assets of between $200 million and $300 million, according to Richard B. Zoller, vice president-investments.

At least four major corporations among the Top 200 this year likely will disappear from next January's list as their employee benefit assets

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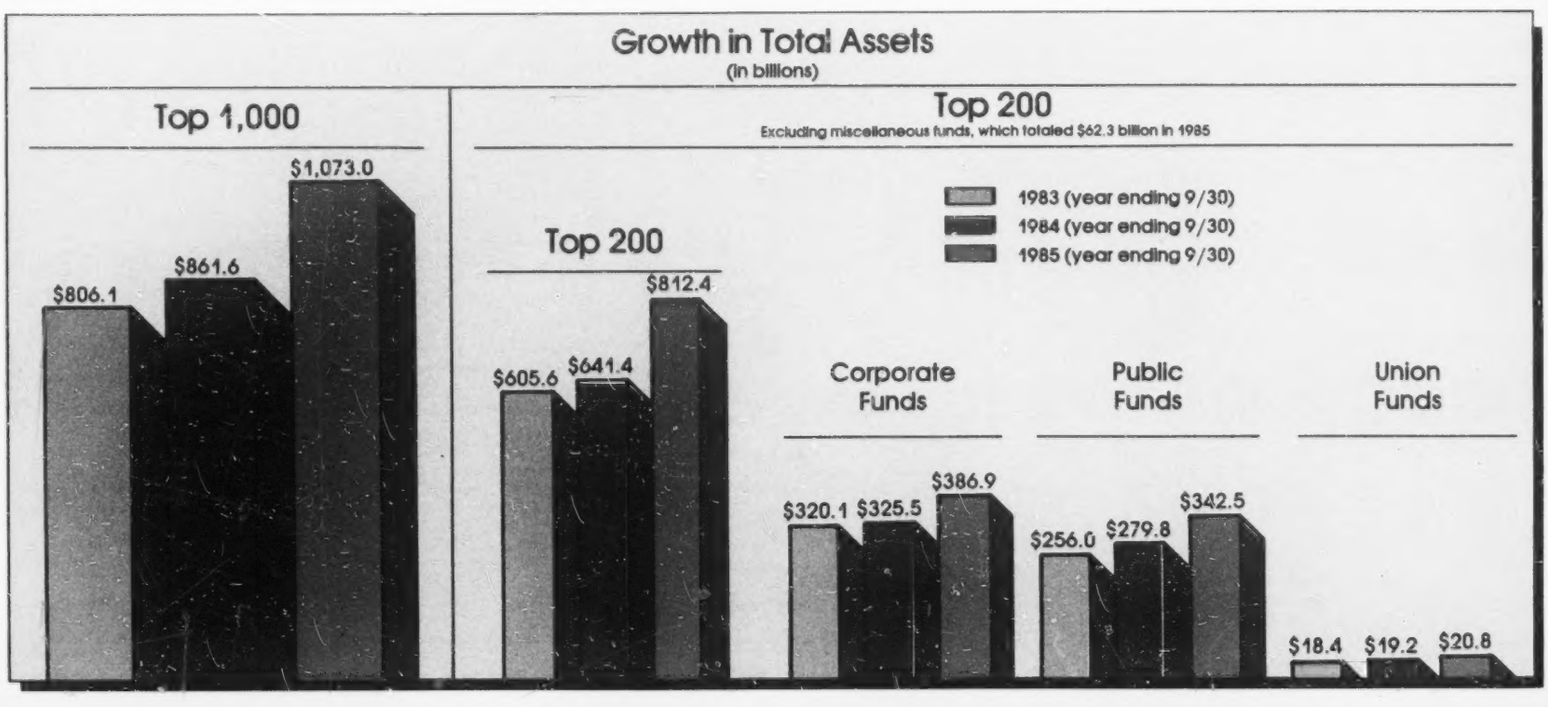

Fund execs try to cut transaction costs

By Chuck Paustian

More than one-third of the pension executives of the nation's 200 largest funds took steps in 1985 to reduce transaction costs, a *Pensions & Investment Age* survey shows.

According to data compiled through questionnaires sent to sponsors of the Top 200 employee benefit funds, direct negotiation or discussion with managers and brokers is the method used most commonly. Of the 77 pension executives who said they tried to cut transaction costs last year, 26 cited direct negotiations and discussions as part of their strategy.

Other popular alternatives include increased monitoring of trades and commission costs, mentioned 11 times; doing program trades, listed eight times; using discount brokers and internal trading, each mentioned six times; and directing brokerage, mentioned five times.

In several cases, the pension officers said, they have incorporated several of the possible alternatives.

These executives are well aware of the need to control transaction costs, noted James Knupp, a principal of the Ennis, Knupp & Gold, a Chicago consulting firm.

"It's like walking down a street with a chain on your leg that you are dragging along. There is a cost to dragging it along and the more you can control it, the better off you are," said Mr. Knupp.

"The easy part that they can measure and keep track of is the brokerage cost. The hard part is the market impact of the trade itself," said Mr. Knupp.

In a separate telephone survey, several pension officers discussed how they are reducing those costs.

Wm. Irwin Arbuckle II, vice president and treasurer of The Board of Pensions of the Presbyterian Church (U.S.A.), Philadelphia, with $1.1 billion in pension assets, said his fund looks at more than just commission costs.

"... We look at execution costs, which include commission costs," said Mr. Arbuckle.

He said the fund derives an average price for a particular stock from the high and low prices of that stock on the day of a trade.

"Then we take the same exercise for the day before and the day after the trade to see if (the managers) are trading into a rising or declining market," Mr. Arbuckle said.

The fund pays an average of 10 cents per share in commission costs, which he wants to reduce to 8 cents in 1986.

"I am attempting to persuade the investment advisers to recognize the importance of net costs, of which commissions is a part," Mr. Arbuckle said.

Charles Hundley, associate executive director of the $1.89 billion Illinois, State Universities Retirement System, Champaign, said the fund's investment managers are receptive to discussing lowering their transaction costs.

The fund has a soft-dollar arrangement with a brokerage house, but the managers are not required to direct their trades to that firm, he added. The fund receives consulting and evaluation services for its soft-dollar business.

"The managers, although they are aware of the soft-dollar arrangement, understand the trade is the most important thing, and we also want them to do (the trade) at a low cost," said Mr. Hundley.

A recently begun program to monitor trades "performs two services. It lets the managers know that we are monitoring them, and it also lets us know if there is something unusual about a particular stock," Mr. Hundley said.

The State of Connecticut Trust Funds, Hartford, with $3.68 billion in assets, has a captive broker-dealer on the Philadelphia Stock Exchange, according to Frank P. McDermott, deputy treasurer for investments.

The brokerage firm, Connecticut Nutmeg Securities Inc., is a wholly owned subsidiary of the Connecticut mutual equity fund, a part of the Connecticut trust fund system. The brokerage firm's purpose is to save money for the pension funds.

"It was established back before the time of negotiated rates. It was done because we thought we were getting ripped off on commissions," said Mr. McDermott.

In addition, Connecticut's in-house trading desk gives "... us better control over our soft-dollar business" and helps monitor social restrictions, he said. "It's a control mechanism."

Mr. McDermott also said the fund is moving toward using more program trades, although he did not have a figure on how much the fund expects to save through its use.

PPG Industries Inc., Pittsburgh, with $1.27 billion in pension assets, intends to start a cost-reduction program sometime this year, probably during the first quarter, said Charles H. Elmer, manager-pension investment administration.

"We haven't made any decisions yet, but we are looking at programs that would allow us to piggyback on top of our master trustee program and identify opportunities for us to reduce our transaction costs," said Mr. Elmer.

"What we're talking about here is not just commissions, but also a way to reduce the market impact of our transactions," he said.

Mr. Elmer said the most expensive of the alternatives would be to broaden the present system, which monitors every trade. Another alternative would be to use program trades, he said.

"The other one would be to use stock-index futures to increase our market exposure without buying and selling securities," he said.

An official of another fund said transaction costs were cut simply by switching banks.

Jennifer Netterville, investment portfolio specialist with the $2.11 billion Teachers Retirement System of Louisiana, Baton Rouge, said the fund moved its bonds to The Chase Manhattan Bank, New York, from it custodian bank, City National Bank of Baton Rouge.

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Public plans are increasing use of dedication and immunization

By Ed Christman

The popularity of bond dedication and immunization as an investment strategy may have peaked among corporate pension funds, but its use is beginning to spread to their public counterparts.

During the past 18 months, five public funds have dedicated more than $2.2 billion; one has set up a $175 million immunized bond portfolio. They are:

- Minnesota State Board of Investment, St. Paul, which dedicated a $2 billion portfolio.
- State Teachers Retirement System of Ohio, Columbus, dedicated $140 million.
- City of Tampa (Fla.) General Employees Retirement Fund, dedicated $38 million.
- Chicago Firemen's Annuity Benefit Fund, dedicated $15 million.
- Kansas City (Mo.) Public School Retirement System, dedicated $8 million.
- Employes' Retirement System of the City of Milwaukee, immunized $175 million.

(In a dedication, a portfolio is set up to generate a cash flow attempting to match the cash flow of a known liability.

(Immunization is a form of dedication to protect against interest-rate fluctuations. The duration of the portfolio matches the duration of liabilities.

(Duration is the weighted average term to maturity where cash flows are stated at present value, according to authors H. Gifford Fong and Frank J. Fabozzi in their book "Fixed Income Portfolio Management.")

Dedication and immunzation gained momentum between 1982 and 1984, growing to $17.2 billion as of Sept. 30, 1984 from $5.2 billion as of Sept. 30, 1982, then climbed only slightly to $18.1 billion as of Sept. 30, 1985, according to *Pensions & Investment Age's* annual survey of the 200 largest U.S. employee benefit funds. However, not all of the public funds that have dedicated or immunized assets, such as Tampa employees, Chicago firemen and Kansas City public schools, are among the Top 200 funds.

The drop in interest rates is the main reason for the slowdown.

Public pension fund executives and industry observers offered a number of reasons why public funds have lagged corporate ones in using dedication and immunization:

- The public sector traditionally is more conservative and slower to use new investment management tools.
- Many public funds are underfunded, so there may not be enough assets to fund the liabilities covered by a dedication.
- Because public funds rely on legislative bodies for contributions, and dedications usually result in lower contributions by the fund sponsor, it may be difficult to get an increase in contributions, if needed, a few years out.

"In the private sector, the motivation for doing a dedication is it enhances profitability by reducing contributions and liabilities and increases cash flow," said James Kaplan, president of Capital Management Sciences, Los Angeles, which designs software for dedications, immunizations and other fixed-income products. "In the public sector, the same demands are not being made."

Decisions about the pension fund tend to become a "political matter," said Lee Munder, president of Munder Capital Management, Birmingham, Mich., which recently completed a $100 million dedication for a union fund.

Munder, which opened in April, has about $250 million under management, of which $200 million is tax exempt.

Mr. Munder said union and public funds have similar problems with dedications.

In the corporate sector, it's easier to get approval for a dedication, he said. In the public sector, the board of trustees of a pension plan is made up of labor representatives as well as city officials.

"When (the board of trustees) sees a dedication proposal, which will result in a reduction of municipal contributions, the city officials clap their hands in glee," he said.

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Top 200 asset mix

1985 vs. 1984

Corporate

	1985	1984
Stocks	48.5%	48.2%
Bonds	25.6	27.5
Cash	8.1	9.5
Real estate equity	5.3	3.9
GICs	5.4	4.5
Annuities	1.2	*
Mortgages	1.0	0.9
Mortgage-backed securities	1.0	0.4
†Other	3.9	5.1

Public

	1985	1984
Stocks	30.1%	27.1%
Bonds	46.5	47.8
Cash	8.9	11.0
Real estate equity	2.5	2.2
GICs	0.3	0.5
Annuities	0.3	*
Mortgages	3.8	4.1
Mortgage-backed securities	6.5	7.0
†Other	1.1	0.3

Union

	1985	1984
Stocks	36.9%	28.3%
Bonds	32.7	30.0
Cash	12.6	14.0
Real estate equity	3.7	6.0
GICs	5.5	2.5
Mortgages	2.2	2.7
Mortgage-backed securities	4.2	3.2
†Other	2.2	13.3

*Annuities included with other in 1984

†Other includes venture capital, oil & gas and misc. investments.

PBGC liabilities top growth

By Joel Chernoff

WASHINGTON — The Pension Benefit Guaranty Corp.'s liabilities soared 72% in the 1985 fiscal year, far outstripping its 28.6% growth in assets.

For the 12-month period ended Sept. 30, the PBGC had total assets of $1.44 billion, up from $1.12 billion the year before.

However, liabilities absorbed by the federal agency, resulting from the terminations of greatly underfunded pension plans, caused its liability to skyrocket. Unofficial estimates put the agency's liabilities at $2.7 billion as of Sept. 30, compared with $1.57 billion 12 months earlier.

In sum, the PBGC faces a whopping $1.3 billion deficit, all of which is attributable to its insurance program for single-employer pension plans.

The agency, which was created by the Employee Retirement Income Security Act of 1974 to back up private pension benefits, took in record claims from the terminations of pension plans maintained by Allis-Chalmers Corp. and Wheeling-Pittsburgh Steel Corp.

Allis-Chalmers' hourly plan was underfunded by $160 million, while four Wheeling-Pitt plans pending termination are estimated to be underfunded by $440 million, although the total might be somewhat higher.

In the meantime, the Reagan administration's four-year struggle to raise the annual premium paid by employers who sponsor single-employer plans was blocked by Congress' failure to pass a deficit-reduction bill before the legislators adjourned in December.

The bill, which may come up when Congress returns Jan. 21, would increase the premium to $8.50 per participant from $2.60.

The stalemate on the deficit-reduction bill also stalled efforts to close up loopholes enabling employers to transfer their pension liabilities to the PBGC.

The agency also made several money manager changes during the year ended Sept. 30.

In late 1984, it terminated Putnam Advisory Co. Inc., Boston, as manager of a $100 million equity portfolio. In early 1985, the agency

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S&P 500 outperformed for five years

TIAA-CREF scores with indexed core portfolio

By Ed Christman

NEW YORK — The $20.8 billion equity portfolio of the nation's largest pension fund has outperformed the Standard & Poor's 500 stock index during the past five years even though it is largely indexed.

For the five-year period ended Dec. 31, the equity portion of the Teachers Insurance and Annuity Association — College Retirement Equities Fund chalked up a 16% compound annual return, compared with 14.7% for the S&P 500.

Since switching 4½ years ago to the large indexed core supplemented by active managers, CREF — the equity side of the $40 billion fund — has outperformed the S&P 500 by 60 basis points.

TIAA-CREF, a nationwide retirement system for higher education, had assets totaling approximately $43.6 billion as of Dec. 31 (and $40 million as of Sept. 30, the reporting period for *Pensions & Investment Age*'s annual ranking of the largest pension funds. The assets double every 4½ years).

Of the $43.6 billion, $22.8 billion in fixed-income assets are handled by TIAA.

Of the approximately $20.8 billion in CREF's portfolio, $14.7 billion, or 70.7%, is indexed. About $12.6 billion is indexed to the S&P 500, and $2.1 billion is in small-capitalization stocks trying to replicate the Wilshire 5,000, excluding the S&P 500.

Its five-year performance has convinced two senior officers of the fund that a large indexed core is crucial to successful management of jumbo pension funds.

Walter G. Ehlers, president of TIAA-CREF, and James S. Martin, executive vice president in charge of CREF investments, said their approach is to use the large indexed core for the equity portfolio, and internal management for both the equity and fixed-income portfolios.

"The proportion of the passive part is partly a function of how much heat you can stand, I suppose, in terms of short-term deviations from the target you set for yourself," Mr. Martin said.

"Some plans may have a much larger tolerance of deviations than others."

Before switching gears, CREF used active managers who tried to control risk through modern portfolio theory.

However, in 1980 when the fund got out of oil stocks too early, CREF underperformed the S&P by five percentage points, causing Mr. Martin and his associates to lose confidence in MPT and to turn to an indexed core.

(CREF's 1980 experience probably now inspires Mr. Martin to observe, "It's more painful to come up short, than it is pleasurable to come out on the plus side of things.")

CREF had used some of the MPT tools to try to control characteristics of the portfolios such as beta and residual risk.

"The problem that we discovered with all of that, of course, is that most of these relationships typically are based on historical correlations, while the world of the late '70s and early '80s was substantially different from the world in which the ratios and the covariances and all those good things were calculated," said Mr. Martin.

Under TIAA-CREF's defined contribution structure, each plan participant directs whether TIAA or CREF should invest the assets. This frees fund executives of the asset mix decision, which is the most important decision a plan executive can make, according to Messrs. Ehlers and Martin.

"It is more important how many dollars you choose to put in equities than it is to then pick a manager that you think is going to do better in equities in general," Mr. Martin said.

Having got past the asset mix decision, "we would call a passive component in any large pension plan crucial," Mr. Martin said.

Although there is no tilt to the S&P 500 index fund that CREF runs, Mr. Martin would not rule that out forever.

"The debate goes on with things like yield tilting," he said. "I think the things that we are looking for have more to do with futures than they do with tilting.

"Principally, we are looking forward to running the index portion more efficiently. The question is whether or not it can be run more efficiently using futures and (Treasury) bills as basically a substitute for the underlying shares, and to the extent that that is a real possibility, the trade-offs are savings on custody fees and transaction fees and all the things that you might avoid if the futures market were efficient enough and broad enough."

However, TIAA-CREF is regulated by New York state's insurance department, which does not allow the use of futures.

Mr. Martin noted the use of futures is a way of providing for the liquidity needs of large funds without forcing them to sell securities in the market.

Since the middle of 1981 CREF has embellished its index core with an active effort, which now totals $6.1 billion. Of that, $3.8 billion is invested in U.S. stocks, using a dividend-discount strategy that provides the raw data on which investment decisions are based, and $2.3 billion is invested in foreign markets.

The objective, which has been met, is to achieve an overall return of 25 to 50 basis points above the market.

On the fixed-income side, a large component, approximately $7.3 billion, of the TIAA portfolio is in direct placements, Mr. Ehlers said.

A 50-member staff rides herd over those investments, allowing $4 billion in publicly traded bonds to be managed actively, he said.

The remainder of the TIAA portfolio is $10.1 billion in mortgages, $1.2 billion in equity real estate and $200 million in miscellaneous investments.

Performance figures for the TIAA portfolio are unavailable because the assets are carried at amortized cost. In 1985, the fund had a net earned rate, or yield after cost, of 11.6%.

From time to time, the fund's performance, particularly CREF's, has come under attack.

"When you are large and visible, people tend to take potshots at you," observed Mr. Ehlers, who spent nine years serving as TIAA's chief investment officer before being named president in early 1984.

From CREF's inception in July 1952 until Sept. 30, 1985, CREF has averaged a 9.6% compound annual return, compared with 10.4% for the S&P 500.

That 9.6% includes start-up costs; without those, the return would have been 10%, he said.

"You can't hang the monkey on our backs for performance done 25 years ago," added Mr. Martin. "Good (CREF) performance today on $20 billion is much more important than bad performance on $160 million 20 years ago.

"The fact of the matter remains that the CREF's performance is probably a number that a vast majority of people doing the same thing would love to have."

Mr. Martin also talked about the shortcomings of using outside money managers.

"When plan sponsors put back together the portfolio of their managers, depending on the situation, the results that they seem to get is the market less a considerable amount," he said.

If CREF officials wanted to use external managers, Mr. Martin said the fund's size means they would have to hire at least 20 firms.

"If 20 stocks can give you a diversified portfolio, then what will 20 managers give you?" Mr. Martin asked. "It would certainly give us something that probably looks like an index fund, with very high costs."

He added, "We all have 20-20 hindsight. It's so very easy to go out and find managers who have in the past done better than CREF. But although many studies have been done ... there is not one that gives us some kind of clue as to how to pick the managers who are going to do well in the future."

In addition, Mr. Martin said, lining up the manager with the plan and its objectives is an important ingredient in the process of managing pension assets.

"Internal management can identify closer and understand better the particular goals of the plan being managed," he said.

"I'm not sure that is true of outside managers."

Messrs. Martin and Ehlers both noted critics of TIAA-CREF *never* have brought up the subject of TIAA's performance with internal management.

On the debit side, internal management is necessary because TIAA does a lot of direct placements, and "you really have to have talented investment people who are on top of the situation, who can make investment judgments," Mr. Ehlers explained.

"If there is credit deteriorations, we have people that go out and work with the company. If it looks like a deteriorating situation, we would hire management consultants to go in and see what they can do with the company. We might try to work out our position or we might try to put more money into it but we have full-time people that do nothing but watch deteriorating credit for the direct placements."

Internal management and size allow TIAA-CREF to reap the reward of having about "as low an expense ratio that you can have," Mr. Ehlers said.

"CREF's direct investment expense is about 2.5 basis points. When you add in everything, the entire expense associated is about 25 basis points, and that includes all expenses that you wouldn't get rid of if you hired outside managers. For TIAA, with everything added in, it is about 35 to 40 basis points."

Mr. Ehlers claims size gives TIAA-CREF clout in the marketplace, aiding the fund in becoming a major player in direct placements, real estate and leveraged buy-outs.

In real estate, for example, "our size allows us to bid for the biggest and best commercial real estate project out there," he said.

"We are almost routinely committing for commercial mortgage projects in excess of $100 million per single project. We have done a few single projects that were over $250 million per single project where we were sole lender. Size lets you do those things.

He added, "TIAA has done over 50 leveraged buy-outs, probably approaching $800 million. We have had very good results there." •

Bottom 800 asset mix

1985 vs. 1984

Corporate

	1985	1984
Stocks	47.7%	49.3%
Bonds	20.2	20.4
Cash	9.7	11.5
Real estate equity	3.8	3.2
Mortgages	0.6	1.1
GICs	12.7	12.0
Annuities	2.8	•
International	1.3	1.0
*Other	1.2	1.5

Public

	1985	1984
Stocks	36.1%	33.3%
Bonds	40.7	40.9
Cash	12.4	15.5
Real estate equity	3.5	3.1
Mortgages	3.5	4.7
GICs	2.3	1.5
Annuities	0.6	•
*Other	0.9	1.0

Union

	1985	1984
Stocks	26.0%	31.9%
Bonds	39.7	39.7
Cash	10.6	13.9
Real estate equity	3.1	3.7
Mortgages	11.8	0.2
GICs	6.2	8.8
Annuities	0.4	•
International	0.1	—
*Other	2.1	1.8

*Annuities included with other in 1984.
*Other includes venture capital, oil & gas and misc. investments.

How the data were gathered

The information on employee benefit funds contained in this issue was developed in several stages.

Money Market Directories Inc., Charlottesville, Va., which annually publishes detailed information on more than 20,000 sponsors of tax-exempt funds, furnished *Pensions & Investment Age* with the identities and asset values of approximately the largest 1,000 fund sponsors.

Questionnaires were sent to the funds on that list as well as funds that appeared in last year's *P&I Age* survey. From the completed questionnaires and follow-up telephone calls, the Top 200 and Top 1,000 funds were identified.

The more detailed information contained in the profiles on the 200 largest funds (beginning on page 30) was obtained from the questionnaires, interviews with fund officials and articles published in *P&I Age*.

In the tables accompanying the profiles, NA (not available) was applied to funds that had less than $1 million allocated to the particular investment as well as to funds that could not provide a breakout of assets *but are known* to invest in those areas. Dollar amounts were rounded to the nearest million.

The asset mix break out for the Top 200 funds will not always match the dollar amounts shown in the individual tables because of problems in computing the amounts. In providing the asset allocation of pension assets as of Sept. 30, some funds used only defined benefit plan assets, some used only defined contribution plan assets and some used the combined assets. *P&I Age*, in computing the Top 200 asset mix, used defined benefit plan assets.

In most cases, the information reflects fund operations as of Sept. 30, 1985. Where no information was available from the fund, data was taken from the 1986 Money Market Directory of Pension Funds and their Investment Managers.

Money Market Directories Inc. is at 300 E. Market St., Charlottesville, Va., 22901.

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Top 200 pension funds/sponsors

(Assets in $ millions)

1.	TIAA-CREF	40,000	68. Atlantic Richfield Co.	3,250	135. Louisiana State Employees	1,500
2.	California Public Employees'	29,166	69. Caterpillar Tractor Co.	3,048	136. Chicago Municipal Employees	1,500
3.	General Motors Corp.	26,300	70. Hughes Aircraft	3,000	137. Owens-Illinois Inc.	1,498
4.	New York State Common Fund	25,997	71. Missouri Public School	2,955	138. National Rural Electric Co-op	1,475
5.	N.Y.C. Retirement Systems	25,063	72. Mass. Employees & Teachers	2,917	139. Sun Co.	1,470
6.	AT&T	24,887	73. Monsanto Co.	2,900	140. World Bank	1,461
7.	General Electric Co.	15,812	74. Union Carbide Corp.	2,800	141. Citicorp	1,432
8.	New York State Teachers	15,303	75. RCA Corp.	2,702	142. Los Angeles City	1,424
9.	California State Teachers	15,100	76. Prudential Insurance Co.	2,699	143. Commonwealth Edison	1,401
10.	IBM Corp.	13,939	77. Iowa Public Employees	2,636	144. TRW	1,391
11.	New Jersey Div. of Investment	12,494	78. Bethlehem Steel Corp.	2,601	145. Raytheon	1,365
12.	Texas Teachers	11,188	79. Metropolitan Life Insurance Co.	2,525	146. Southern California Edison	1,362
13.	Ford Motor Co.	11,000	80. Sperry Corp.	2,500	147. Inland Steel Co.	1,332
14.	Wisconsin Investment Board	10,800	81. Chrysler Corp.	2,497	148. Bakery & Confectionery	1,317
15.	Ohio Public Employees	10,760	82. Pacific Gas & Electric Co.	2,482	149. Oklahoma Teachers System	1,312
16.	Michigan State Employees	10,516	83. Detroit Retirement Systems	2,469	150. FMC Corp.	1,300
17.	Ohio State Teachers	10,178	84. Mississippi Public Employees	2,465	151. Marathon Oil Co.	1,300
18.	E.I. du Pont de Nemours & Co.	9,665	85. Hawaii Employees' System	2,374	152. Standard Oil Co. (Ohio)	1,297
19.	NYNEX Corp.	9,447	86. R.J. Reynolds	2,361	153. International Paper	1,280
20.	Florida Dept. of Admin.	8,911	87. Illinois Municipal Employees	2,318	154. Unocal Corp.	1,272
21.	North Carolina Employees	8,773	88. American Airlines	2,275	155. PPG Industries	1,265
22.	Ameritech	8,300	89. Delta Air Lines	2,250	156. Travelers Insurance	1,265
23.	Exxon Corp.	8,008	90. Kansas Public Employees	2,216	157. Int'l Union of Oper. Eng.	1,241
24.	Bell Atlantic Corp.	8,000	91. Alaska Retirement Systems	2,185	158. Getty Oil	1,230
25.	U.S. Steel Corp.	8,000	92. The LTV Corp.	2,173	159. McDermott International	1,229
26.	Pennsylvania School Employees	7,825	93. Utah State Employees	2,160	160. New York Life	1,218
27.	BellSouth Corp.	6,983	94. San Francisco Employees	2,157	161. Texas Municipal System	1,200
28.	Minnesota Investment Board	6,800	95. Northrop Corp.	2,142	162. Philip Morris	1,180
29.	Washington Investment Board	6,749	96. Procter & Gamble	2,123	163. Cooper Industries Inc.	1,150
30.	GTE Corp.	6,740	97. Goodyear Tire & Rubber Co.	2,123	164. Hercules Inc.	1,144
31.	Pacific Telesis Group	6,316	98. Louisiana Teachers	2,110	165. Arkansas Teacher System	1,134
32.	Georgia State Systems	6,053	99. Phillips Petroleum Co.	2,109	166. Rhode Island Employees	1,128
33.	Chevron Corp.	6,004	100. Chicago Public School Teachers	2,074	167. Texas County & District	1,127
34.	Allied-Signal Inc.	6,000	101. ITT Corp.	2,060	168. West Virginia State Employees	1,116
35.	Teamsters, Western Conference	5,929	102. Aluminum Co. of America	2,051	169. American Stores Co.	1,105
36.	Teamsters, Central States	5,775	103. Texaco	2,028	170. Presbyterian Church Board	1,104
37.	L.A. County Employees	5,747	104. Trans World Airlines	2,008	171. Indiana State Teachers	1,101
38.	University of California	5,700	105. Grumman Corp.	1,953	172. Bechtel Power Corp.	1,100
39.	U S WEST	5,675	106. United Methodist Pension Fund	1,945	173. Philadelphia Municipal Employees	1,097
40.	Eastman Kodak	5,582	107. Illinois State Board	1,934	174. Teledyne	1,089
41.	Boeing Co.	5,509	108. Illinois State Universities	1,886	175. Pan American World Airways	1,075
42.	United Technologies Corp.	5,500	109. Tenneco Inc.	1,878	176. Southern New England Telephone	1,075
43.	Sears, Roebuck & Co.	5,481	110. General Foods Corp.	1,855	177. Eli Lilly & Co.	1,073
44.	Pennsylvania State Employees	5,418	111. Kentucky Teachers' System	1,853	178. New Mexico Educational	1,069
45.	Rockwell International	5,218	112. Ohio Police and Firemen	1,848	179. Florida Power & Light	1,058
46.	Oregon Public Employees	5,100	113. Xerox Corp.	1,845	180. International Harvester Co.	1,047
47.	Colorado Public Employees	5,024	114. Deere & Co.	1,844	181. L.A. Water & Power	1,037
48.	Maryland State System	5,020	115. J.C. Penney Co.	1,830	182. Halliburton Co.	1,018
49.	South Carolina Retirement System	4,980	116. Los Angeles Fire & Police	1,757	183. American Can Co.	1,014
50.	Shell Oil Co.	4,979	117. Tennessee Valley Authority	1,753	184. Episcopal Church	1,010
51.	McDonnell Douglas Corp.	4,914	118. Indiana Public Employees	1,750	185. CIGNA Corp.	1,002
52.	Alabama Retirement Systems	4,744	119. Consolidated Edison	1,735	186. K mart Corp.	1,001
53.	Southwestern Bell Corp.	4,616	120. Conoco Inc.	1,729	187. Milwaukee City Employees	1,000
54.	Mobil Oil Corp.	4,553	121. Minnesota Mining & Mfg.	1,726	188. Motorola	977
55.	Virginia Supplemental System	4,509	122. Martin Marietta Corp.	1,705	189. New Mexico Public Employees	973
56.	Illinois Teachers	4,474	123. Ohio School Employees	1,704	190. I.A.M. National	959
57.	Lockheed Corp.	4,373	124. Kentucky Retirement Systems	1,656	191. Eaton Corp.	955
58.	United Nations Joint Staff	4,354	125. Southern Co. Services	1,650	192. John Hancock Mutual Life	948
59.	Westinghouse Electric Corp.	4,250	126. Honeywell Inc.	1,639	193. Houston Retirement System	935
60.	Tennessee Consolidated	4,249	127. Dow Chemical Co.	1,620	194. Texas Instruments	930
61.	Arizona State System	4,103	128. Boilermakers and Blacksmiths	1,604	195. KMI Continental	928
62.	United Mine Workers	3,938	129. Southern Baptist Church	1,600	196. Ashland Oil	922
63.	Connecticut Trust Funds	3,684	130. Nevada Public Employees	1,598	197. Baltimore Employees System	920
64.	Amoco Corp.	3,540	131. Aetna Life & Casualty	1,586	198. North American Philips	901
65.	United Air Lines	3,411	132. Eastern Air Lines	1,570	199. Dresser Industries	900
66.	General Dynamics Corp.	3,300	133. Dart & Kraft	1,552	200. Kaiser Permanente	900
67.	Texas Employees	3,300	134. Armco Inc.	1,529	**Total**	**812,442**

Ranking of funds/sponsors 201-1,000

Rank	Fund/sponsor	Location	Assets
201.	GenCorp	Akron, Ohio	900
202.	Montana Board	Helena	900
203.	Santa Fe Southern	Chicago	900
204.	MEBA	Baltimore	896
205.	National Intergroup	Pittsburgh	891
206.	Delaware State	Dover	886
207.	Abbott Labs	Abbott Park, Ill.	880
208.	Army/Air Force Exch.	Dallas	879
209.	Champion International	Stamford, Conn.	878
210.	Natl. Food Workers	Chicago	869
211.	Idaho PERS	Boise	859
212.	Maine Retirement	Augusta	857
213.	American Bar Assoc	Chicago	855
214.	Michigan Municipal	Lansing	852
215.	BATUS	Louisville, Ky.	850
216.	Burlington Northern	Seattle	850
217.	CBS	New York	850
218.	Sandia National Labs	Albuquerque, N.M.	849
219.	Chicago Policemen	Chicago	849
220.	Financial Institutions	White Plains, N.Y.	840
221.	American Cyanamid	Wayne, N.J.	835
222.	United Telecom	Shawnee, Kan.	831
223.	Retail Clerks & Empl.	Walnut Crk., Calif.	825
224.	Merck & Co.	Rahway, N.J.	824
225.	Pacific Lighting	Los Angeles	824
226.	Bristol-Myers	New York	819
227.	Dun & Bradstreet	New York	819
228.	Amer. Elec. Power	Columbus, Ohio	804
229.	American Standard	New York	803
230.	United Parcel Service	Greenwich, Conn.	803
231.	NADA Retirement	McLean, Va.	800
232.	Upjohn	Kalamazoo, Mich.	800
233.	Warner-Lambert	Morris Plains, N.J.	800
234.	Burroughs	Detroit	795
235.	Texas Utilities	Dallas	787
236.	Arkansas PERS	Little Rock	784
237.	Federated Dept. Stores	Cincinnati	784
238.	Duke Power	Charlotte, N.C.	782
239.	Continental Can	Stamford, Conn.	778
240.	ARAMCO Services	Houston	775
241.	Rohm and Haas	Philadelphia	770
242.	Pfizer	New York	763
243.	NCR	Dayton, Ohio	763
244.	Public Safety Personnel	Phoenix, Ariz.	756
245.	Wyoming Retirement	Cheyenne	756
246.	Hallmark Cards	Kansas City, Mo.	750
247.	Montgomery Ward	Chicago	750
248.	MHT	New York	746
249.	N. England Teamsters	Boston	745
250.	Columbia Gas System	Wilmington, Del.	743
251.	Celt Industries	New York	740
252.	W.R. Grace	New York	739
253.	Colgate-Palmolive	New York	733
254.	Niagara Mohawk	Syracuse, N.Y.	731
255.	Olin	Stamford, Conn.	729
256.	Whirlpool	Benton Hbr., Mich.	727
257.	Hosp./Health #1199	New York	726
258.	Scott Paper	Philadelphia	723
259.	Litton Industries	Beverly Hills, Calif.	716
260.	Amer. Exp. Fireman's	Larkspur, Calif.	710
261.	Hewlett Packard	Palo Alto, Calif.	710
262.	S. Dakota Retirement	Pierre	701
263.	Johnson & Johnson	N. Brunswick, N.J.	700
264.	SmithKline Beckman	Philadelphia	700
265.	Missouri Employees	Jefferson City	697
266.	Cook County	Chicago	691
267.	ILGWU	New York	689
268.	Crown Zellerbach	San Francisco	688
269.	Philadelphia Electric	Philadelphia	688
270.	S. Calif. Carpenters	Los Angeles	682
271.	Union Pacific	New York	680
272.	Sheet Metal Intl.	Washington	675
273.	General Mills	Minneapolis	674
274.	Dana	Toledo, Ohio	670
275.	Gulf & Western Ind.	New York	670
276.	Oper. Eng. #12	Pasadena, Calif.	667
277.	Borg-Warner	Chicago	665
278.	CIBA-Geigy	Ardsley, N.Y.	665
279.	Food & Comm. Wrkrs.	Cypress, Calif.	661
280.	Middle South Utilities	New Orleans	660
281.	Oper. Eng. #302, #612	Seattle	656
282.	Boise Cascade	Boise, Idaho	656
283.	Orange County	Santa Ana, Calif.	650
284.	Safeway Stores	Oakland, Calif.	649
285.	Ethyl	Richmond, Va.	647
286.	Public Service E&G	Newark, N.J.	647
287.	Control Data	Minneapolis	643
288.	Northwest Airlines	St. Paul, Minn.	642
289.	Occidental Petroleum	Los Angeles	636
290.	YMCA	New York	636
291.	InterNorth	Omaha, Neb.	635
292.	Chicago Transit	Chicago	632
293.	Hoffmann-LaRoche	Nutley, N.J.	632
294.	General Public Utilities	Parsippany, N.J.	631
295.	Schlumberger	New York	631
296.	Ralston Purina	St. Louis	630
297.	Manville	Denver	628
298.	Brown & Root	Houston	623
299.	Burlington Industries	Greensboro, N.C.	615
300.	Lutheran Church/Amer.	Minneapolis	615
301.	Weyerhaeuser	Tacoma, Wash.	609
302.	Norfolk Southern	Roanoke, Va.	605
303.	Beatrice Companies	Chicago	604
304.	B.F. Goodrich	Akron, Ohio	603
305.	Ingersoll-Rand	Woodcliff Lake, N.J.	602
306.	Georgia-Pacific	Atlanta	601
307.	Central & South West	Dallas	601
308.	Cummins Engine Co.	Columbus, Ind.	600
309.	Westvaco	New York	595
310.	Detroit Edison	Detroit	593
311.	Singer	Stamford, Conn.	592
312.	Polaroid	Cambridge, Mass.	585
313.	Household Intl.	Prospect Heights, Ill.	585
314.	Corning Glass Works	Corning, N.Y.	582
315.	Owens-Corning	Toledo, Ohio	577
316.	Consumers Power	Jackson, Mich.	573
317.	Kaiser Alum. & Chem.	Oakland, Calif.	566
318.	Conrail	Philadelphia	566
319.	Minneapolis Empl.	Minneapolis	563
320.	Deseret Mutual Benefit	Salt Lake City	562
321.	Oper. Eng. #3	San Francisco	561
322.	Cons. Natural Gas	New York	557
323.	National Red Cross	Washington	555
324.	Digital Equipment	Weston, Mass.	553
325.	E-Systems	Dallas	550
326.	Libbey-Owens-Ford	Toledo, Ohio	542
327.	N.H. Retirement	Concord	540
328.	Blue Cross/BlueShield	Chicago	540
329.	Budd	Troy, Mich.	535
330.	USG	Chicago	534
331.	Savings Institutions	New York	531
332.	Cincinnati City	Cincinnati	530
333.	Wayne County	Detroit	526
334.	Armstrong World Ind.	Lancaster, Pa.	525
335.	CSX	Richmond, Va.	525
336.	PepsiCo	Purchase, N.Y.	522
337.	Alameda County	Oakland, Calif.	522
338.	N. Calif. Carpenters	San Francisco	521
339.	Southland	Dallas	521
340.	United Church Boards	New York	521
341.	Farmland Industries	Kansas City, Mo.	516
342.	San Diego County	Calif.	516
343.	Campbell Soup	Camden, N.J.	514
344.	Northeast Utilities	Hartford, Conn.	512
345.	Northern States Power	Minneapolis	506
346.	Lutheran/Mo. Synod	St. Louis	505
347.	Electricians Empl.	Flushing, N.Y.	500
348.	AMAX	Greenwich, Conn.	499
349.	Combustion Eng.	Stamford, Conn.	498
350.	Kellogg	Battle Creek, Mich.	490
351.	Winn-Dixie Stores	Jacksonville, Fla.	490
352.	American Brands	New York	488
353.	Central Pa. Teamsters	Reading	488
354.	Denver Public Schools	Denver	487
355.	Greyhound	Phoenix, Ariz.	484
356.	IBEW Intl. HQ	Washington	483
357.	Coca-Cola	Atlanta	480
358.	Mass. Bay Transit	Boston	480
359.	San Bernardino County	Calif.	480
360.	Motion Picture Ind.	Studio City, Calif.	479
361.	Baltimore G&E	Baltimore	475
362.	Emhart	Hartford, Conn.	475
363.	Pillsbury	Minneapolis	475
364.	N. Dakota State	Bismarck	475
365.	Chesebrough-Pond's	Westport, Conn.	475
366.	San Diego City	Calif.	474
367.	Air Products & Chem.	Allentown, Pa.	473
368.	Continental Telecom	Atlanta	470
369.	City Investing	New York	469
370.	Quaker Oats	Chicago	467
371.	Kimberly-Clark	Dallas	466
372.	Anheuser-Busch	St. Louis	465
373.	NL Industries	New York	465
374.	Time	New York	458
375.	Reynolds Metals	Richmond, Va.	457
376.	People's Energy	Chicago	453
377.	Amer. Baptist Church	New York	452
378.	Battelle Memorial Inst.	Columbus, Ohio	451
379.	ICMA	Washington	451
380.	San Jose City	Calif.	450
381.	U.S. Air	Washington	450
382.	Marsh & McLennan	New York	447
383.	Sherwin-Williams	Cleveland	444
384.	Dallas City	Dallas	443
385.	Virginia Power	Richmond	441
386.	Contra Costa County	Martinez, Calif.	440
387.	General Signal	Stamford, Conn.	440
388.	Dayton Hudson	Minneapolis	439
389.	Masters/Mates/Pilots	Linthicum Hts., Md.	435
390.	Pa. Power & Light	Allentown	433
391.	S. Calif. Laborers	Los Angeles	431
392.	R.R. Donnelly & Sons	Chicago	430
393.	Container Corp./Amer.	Chicago	428
394.	Emerson Electric	St. Louis	427
395.	Teamsters	Chicago	425
396.	Uniroyal	Middlebury, Conn.	425
397.	Fairchild Industries	Chantilly, Va.	424
398.	Sacramento County	Calif.	422
399.	Cincinnati Bell	Cincinnati	422
400.	Morton-Thiokol	Chicago	420
401.	Penn Central	Greenwich, Conn.	420
402.	Alaska Teamsters	Anchorage	419
403.	Firestone Tire & Rubber	Akron, Ohio	419
404.	Stone & Webster	New York	418
405.	Milwaukee County	Milwaukee	417
406.	Avon Products	New York	415
407.	Laborers Texas Natl.	Dallas	412
408.	White Consolidated	Cleveland	412
409.	Ohio Edison	Akron	411
410.	Harris	Melbourne, Fla.	410
411.	Clothing/Textile Wrkrs.	New York	410
412.	NYC Carpenters	New York	405
413.	May Dept. Stores	St. Louis	403
414.	Tektronix	Beaverton, Ore.	403
415.	Cleveland Electric	Cleveland	403
416.	AFTRA	New York	400
417.	De Luxe Check	St. Paul, Minn.	400
418.	Timken	Canton, Ohio	400
419.	Allied Stores	New York	396
420.	Teamsters #710	Chicago	395
421.	Schering-Plough	Madison, N.J.	395
422.	Chicago Laborers	Forest Park, Ill.	390
423.	Navy Resale	Staten Island, N.Y.	390
424.	Primark	Detroit	390
425.	Graphic Comm. Intl.	Washington	388
426.	Montgomery County	Rockville, Md.	388
427.	Baltimore County	Towson, Md.	387
428.	Oper. Eng. #150	Countryside, Ill.	387
429.	Ex-Cell-O	Troy, Mich.	385
430.	Houston Industries	Houston	385
431.	Squibb	Princeton, N.J.	385
432.	Texas Eastern	Houston	385
433.	Union Camp	Wayne, N.J.	385
434.	Memphis City	Tenn.	384
435.	Nebraska Investment	Lincoln	384
436.	Sundstrand	Rockford, Ill.	384
437.	Vermont State	Montpelier	383
438.	Gillette	Boston	382
439.	Liberty Mutual Ins.	Boston	382
440.	ICI Americas	Wilmington, Del.	381
441.	ABC	New York	381
442.	Koppers	Pittsburgh	380
443.	Levi Strauss & Co.	San Francisco	380
444.	Transco Energy	Houston	380
445.	Cleveland Carpenters	Cleveland	378
446.	Allegheny Power	New York	378
447.	Amer. Hospital Supply	Evanston, Ill.	375
448.	U.S. Gypsum	Chicago	374
449.	New England Electric	Westboro, Mass.	374
450.	Christian Fund	Indianapolis	372
451.	Pennzoil	Houston	372
452.	ITU Negotiated Plan	Colo. Springs, Colo.	370
453.	Food Workers Natl. HQ	Washington	369
454.	Painters/Allied Trades	Washington	368
455.	N.Y. Longshoremen	New York	367
456.	Cincinnati Milacron	Cincinnati	365
457.	Fruehauf	Detroit	363
458.	IC Industries	Chicago	363
459.	Amer. Nat. Resources	Detroit	361
460.	Louisiana Schools	Baton Rouge	360
461.	National Elevator	New Castle, Del.	359
462.	Musicians' Federation	New York	358
463.	Chicago Firemen	Chicago	357
464.	AMP	Harrisburg, Pa.	357
465.	Norton	Worcester, Mass.	356
466.	Union Electric	St. Louis	356
467.	Southern Pacific	San Francisco	354
468.	Wisconsin Electric	Milwaukee	353
469.	H.J. Heinz	Pittsburgh	352
470.	GCLU	Los Angeles	352
471.	Sara Lee	Chicago	352
472.	A.J Bayless Markets	Phoenix, Ariz.	352
473.	Amer. Home Products	New York	351

Ranking of funds/sponsors 201-1,000

Rank	Fund/sponsor	Location	Assets
474.	American Motors	Southfield, Mich.	350
475.	ENSERCH	Dallas	350
476.	F.W. Woolworth	New York	535
477.	Mead	Dayton, Ohio	350
478.	Sandoz	New York	350
479.	MidCon	Lombard, Ill.	350
480.	Briggs & Stratton	Milwaukee	350
481.	N. Calif. Laborers	San Francisco	349
482.	Rexnord Plastic Eng.	Brookfield, Wis.	348
483.	Aerospace	El Segundo, Calif.	348
484.	New York State E&G	Ithaca, N.Y.	347
485.	Fluor	Irvine, Calif.	346
486.	AMCA International	Hanover, N.H.	346
487.	CPC International Inc.	Englewood Cl., N.J.	345
488.	Teamsters #705	Chicago	344
489.	Food Wrkrs/Retail	Atlanta	344
490.	Arthur D. Little	Cambridge, Mass.	342
491.	ASARCO	New York	340
492.	J.P. Stevens & Co.	New York	340
493.	Kroger	Cincinnati	340
494.	Serv.Empl.#32B,#32J	New York	339
495.	Clark Equipment	Buchanan, Mich.	336
496.	A.O. Smith	Milwaukee	336
497.	Mo. Local Gov't.	Jefferson City, Mo.	336
498.	Cincinnati G&E	Cincinnati	334
499.	Intl. Typographical HQ	Colo. Springs, Colo.	334
500.	McGraw-Hill	New York	331
501.	Marriott	Washington	329
502.	Florida Progress	St. Petersburg, Fla.	328
503.	Inter-Local Pension	Chicago	328
504.	Paperworkers Intl.	Nashville, Tenn.	328
505.	Paper Industry Union	Nashville, Tenn.	326
506.	Chicago Carpenters	Chicago	325
507.	Jacksonville City	Florida	325
508.	Screen Act./Prod.	N. Hollywood	325
509.	Seattle Employees	Seattle	325
510.	Printing Pressmen	Los Angeles	324
511.	Perkin-Elmer	Norwalk, Conn.	324
512.	Oper. Eng. Ohio #18	Cleveland	324
513.	W. Lumber Production	Portland, Ore.	324
514.	Calif. Plumbers	Los Angeles	322
515.	Allen-Bradley	Milwaukee	322
516.	Roadway Services	Akron, Ohio	322
517.	W. Pa. Teamsters	Pittsburgh	320
518.	Carpenter Technology	Reading, Pa.	318
519.	Borden	Columbus, Ohio	314
520.	Panhandle Eastern	Kansas City, Mo.	313
521.	Allis-Chalmers	Milwaukee	313
522.	IBEW #11	Los Angeles	312
523.	Amstar	New York	310
524.	Boc Group	Montvale, N.J.	310
525.	Long Island Lighting	Hicksville, N.Y.	310
526.	Washington Post	Washington	308
527.	Pitney Bowes	Stamford, Conn.	308
528.	Phelps Dodge	New York	305
529.	NMU	New York	304
530.	Williams Companies	Tulsa, Okla.	304
531.	Western Union	U. Saddle Riv., N.J.	303
532.	Ventura County	Calif.	303
533.	Arthur Andersen & Co.	Chicago	302
534.	Nat'l Dist. & Chem.	New York	301
535.	Celanese	New York	300
536.	Mich. Consolidated Gas	Detroit	300
537.	Miami City Employees	Miami	299
538.	Goldman, Sachs	New York	298
539.	Graphic Arts #245	Chicago	298
540.	Colorado Fire & Police	Denver	296
541.	Geo. A. Hormel & Co.	Austin, Minn.	295
542.	ILWU-PMA	San Francisco	295
543.	National Maritime	New York	295
544.	S. Calif. Rapid Transit	Los Angeles	294
545.	Interlake	Oak Brook, Ill.	294
546.	Pennwalt	Philadelphia	293
547.	Walgreen	Deerfield, Ill.	292
548.	Kern County	Bakersfield, Calif.	292
549.	N.Y. State Teamsters	Utica, N.Y.	292
550.	Mars	McLean, Va.	290
551.	McKesson	San Francisco	290
552.	Northern Illinois Gas	Aurora, Ill.	290
553.	Amsted Industries	Chicago	290
554.	Gannett Co.	Rochester, N.Y.	288
555.	Anchor Hocking	Lancaster, Ohio	288
556.	Lever Brothers	Englewood Cl., N.J.	287
557.	ILWU-PMA	San Francisco	287
558.	Food Wrkrs. #455	Houston	285
559.	Reader's Digest Assoc.	Pleasantville, N.Y.	285
560	Mitre	Bedford, Mass.	285
561.	Agway	Syracuse, N.Y.	285
562.	Cement Workers Intl.	Elk Grove Vill., Ill.	284
563.	Fresno County	Calif.	283
564.	Calif. Iron Workers	San Marino, Calif.	283
565.	Carnation	Los Angeles	282
566.	Lear Siegler	Santa Monica, Calif.	282
567.	Miles Labs	Elkhart, Ind.	282
568.	Milliken & Co.	Spartanburg, S.C.	282
569.	Mercantile Stores	New York	281
570.	Laborers Intl. HQ	Washington	280
571.	Atlanta General	Atlanta	279
572.	Delmarva Power & Light	Wilmington, Del.	279
573.	Joseph E. Seagram	New York	277
574.	Food Wrkrs. #27	Baltimore	277
575.	Allegheny International	Pittsburgh	276
576.	Lithographers	Washington	276
577.	Moore Business (USA)	New York	276
578.	Minneapolis Teachers	Minneapolis	275
579.	Tribune	Chicago	275
580.	Detroit Carpenters	Southfield, Mich.	275
581.	Seafarers Intl. HQ	Camp Springs, Md.	273
582.	Coastal	Houston	271
583.	Building Trades	Milwaukee	271
584.	Public Service/Colo.	Denver	270
585.	Becton Dickinson	Paramus, N.J.	270
586.	Sonat	Birmingham, Ala.	270
587.	Oper. Eng. #324	Birmingham, Mich.	270
588.	Fort Worth Employees	Texas	267
589.	Piedmont Aviation	Wins.-Salem, N.C.	267
590.	Kidde	Saddle Brook, N.J.	265
591.	Hughes Tool	Houston	264
592.	Laborers Construction	Forest Park, Ill.	264
593.	Inter-Amer. Dev. Bank	Washington	260
594.	Dallas Police & Fire	Dallas	260
595.	Fairfax County	Fairfax, Va.	260
596.	Chef Pierre	Traverse City, Mich.	258
597.	Intl. Minerals & Chem.	Mundelein, Ill.	258
598.	GrandMet USA	Montvale, N.J.	257
599.	Centel	Chicago	256
600.	Flint City Employees	Mich.	255
601.	Anderson, Clayton	Houston	255
602.	Endata	Nashville, Tenn.	252
603.	Nalco Chemical	Oak Brook, Ill.	250
604.	Arizona Public Service	Phoenix, Ariz.	249
605.	Brunswick	Skokie, Ill.	248
606.	San Joaquin County	Stockton, Calif.	248
607.	Rohr Industries	Chula Vista, Calif.	248
608.	Savings Banks Empl.	Boston	248
609.	Picklands Mather & Co.	Cleveland	246
610.	Boston Edison	Boston	246
611.	Jim Walter	Tampa, Fla.	246
612.	Peat, Marwick, Mitchell	New York	246
613.	Boy Scouts of America	Irving, Texas	245
614.	Gulf States Utilities	Beaumont, Texas	245
615.	Hospital Corp./Amer.	Nashville, Tenn.	245
616.	S.C. Johnson & Son	Racine, Wis.	244
617.	Great North. Nekoosa	Stamford, Conn.	244
618.	Denver Employees	Denver	243
619.	GATX	Chicago	243
620.	Zenith Electronics	Chicago	243
621.	STA-ILA	Baltimore	242
622.	Reliance Electric	Cleveland	240
623.	Alexander & Alexander	Baltimore	240
624.	Blue Bell	Greensboro, N.C.	240
625.	Equitable Life	New York	240
626.	Publix Super Markets	Lakeland, Fla.	240
627.	Graybar Electric	Clayton, Mo.	240
628.	Wheeling-Pittsburgh	Pittsburgh	239
629.	Hartford Employees	Conn.	239
630.	Gates	Denver	239
631.	Memphis Light, G&W	Tenn.	239
632.	James River	Richmond, Va.	238
633.	Midwest Food Wrkrs.	Chicago	238
634.	Johnson & Higgins	New York	237
635.	Rapid-American	New York	237
636.	Carter Hawley Hale	Los Angeles	237
637.	Phila. Carpenters	Philadelphia	235
638.	Esmark	Chicago	235
639	Mass. Carpenters	Burlington	235
640.	Champion Spark Plug	Toledo, Ohio	234
641.	Chubb	New York	234
642.	Chicago Food Wrkrs.	Chicago	234
643	San Diego Gas & Elec.	Calif.	234
644.	Akzo America	Enka, N.C.	233
645.	Food Wrkrs #876	Madison Hts., Mich.	233
646.	Cont./IBEW #134	Chicago	233
647.	Armstrong Rubber	New Haven, Conn.	233
648.	N. Dakota Teachers	Bismarck	232
649.	Carpenters, C&W Ind.	Indianapolis	232
650.	N. Ind. Pub. Service	Hammond	232
651.	Washington Gas Light	Washington	231
652.	Baker International	Orange, Calif.	231
653.	Cleveland-Cliffs Iron	Cleveland	230
654.	Calif. Food Workers	Oakland	230
655.	SCM	New York	230
656.	Phila. Teamsters	Philadelphia	230
657.	Fort Howard Paper	Green Bay, Wis.	230
658.	Tiger International	Los Angeles	229
659.	Outboard Marine	Waukegan, Ill.	228
660.	Nietz Electric	Rochester, Minn.	228
661.	Steelcase	Gr. Rapids, Mich.	227
662.	Mobay Chemical	Pittsburgh	226
663.	Vol. Hosps. & Homes	New York	226
664.	Hershey Foods	Hershey, Pa.	225
665.	Lukens	Coatesville, Pa.	225
666.	Potlatch	San Francisco	225
667.	Public Schools	St. Louis	225
668.	Sterling Drug	New York	225
669.	Hammermill Paper	Erie, Pa.	225
670.	Brockway (N.Y.)	Brockway, Pa.	223
671.	Baxter Travenol Labs	Deerfield, Ill.	221
672.	Alco Standard	Valley Forge, Pa.	220
673.	Burroughs Wellcome	Research Tri., N.C.	220
674.	Comm. Clearing House	Chicago	220
675.	Plumbers #597	Chicago	219
676.	Johnson Controls	Milwaukee	219
677.	Sanders Associates	Nashua, N.H.	219
678.	W. Wash. Carpenter	Seattle	219
679.	San Mateo County	Redwood City, Calif.	219
680.	Wal-Mart Stores	Bentonville, Ark.	218
681.	Maytag	Newton, Iowa	218
682.	Typographical Union	Chicago	218
683.	Gerber Products	Fremont, Mich.	217
684.	USAA	San Antonio, Texas	217
685.	Western Metal Industry	Seattle	215
686.	Sheet Metal, #108	Los Angeles	215
687.	United Energy Res.	Houston	215
688.	J.M. Huber	Edison, N.J.	213
689.	AMFAC	San Francisco	213
690.	Rochester G&E	Rochester, N.Y.	212
691.	McKinsey & Co.	New York	212
692.	ONEOK	Tulsa, Okla.	211
693.	Brooklyn Union Gas	Brooklyn, N.Y.	211
694.	Phoenix City	Ariz.	211
695.	R.H. Macy & Co.	New York	211
696.	Sacramento City	Calif.	211
697.	EG&G	Wellesley, Mass.	210
698.	National Geographic	Washington	210
699.	Maritime Assoc. & ILA	Houston	210
700.	Ogden	New York	210
701.	Newmont Mining	New York	210
702.	Diamond Shamrock	Dallas	209
703.	Potomac Electric	Washington	209
704.	Amerada Hess	New York	208
705.	Chicago Sanitary Dist.	Chicago	208
706.	Natl. Football League	New York	207
707.	Baton Rouge/Parish	Baton Rouge, La.	206
708.	Federal-Mogul	Detroit	206
709.	Greater Cleve. Hospital	Cleveland	205
710.	Vulcan Materials	Birmingham, Ala.	205
711.	Koch Industries	Wichita, Kan.	204
712.	St. Louis Employees	Missouri	204
713.	Square D	Palatine, Ill.	203
714.	BASF Wyandotte	Parsippany, N.J.	203
715.	Cultural Institutions	New York	203
716.	Alumax	San Mateo, Calif.	202
717.	Northwest Pipeline	Salt Lake City	201
718.	National Fuel & Gas	Buffalo, N.Y.	200
719.	Fresno City	Calif.	200
720.	Inco United States	New York	200
721.	Joy Manufacturing	Pittsburgh	200
722.	National Can	Chicago	200
723.	Teamsters #182	Utica, N.Y.	200
724.	Arlington County	Virginia	200
725.	Automotive Industries	Oakland, Calif.	199
726.	S'western Pub. Serv.	Amarillo, Texas	199
727.	Illinois Power	Decatur, Ill.	199
728.	Norfolk Employees	Virginia	199
729.	Nestle	White Plains, N.Y.	198
730.	Columbus/S.Ohio Elec.	Columbus, Ohio	198
731.	Cyclops	Pittsburgh	198
732.	Equifax	Atlanta	198
733.	District 9 IAM & AW	Bridgeton, Mo.	198
734.	Gould	Roll. Meadows, Ill.	197
735.	IBEW #1547	Anchorage, Alaska	197
736.	Okla. Gas & Elec.	Oklahoma City	196
737.	UAW Dist.#65	New York	196
738.	Knight-Ridder	Miami	196
739.	Pacific Power & Light	Portland, Ore.	196
740.	Natl. Telephone Co-op	Washington	195
741.	Clothing/Textile Wrkrs.	New York	194
742.	Park Employees	Chicago	194
743.	Ohio Laborers	Columbus	194
744.	Bricklayers Intl.	Washington	193
745.	Loews	New York	193
746.	Consolidated Papers	Wis. Rapids, Wis.	193
747.	Tampa Fire & Police	Tampa, Fla.	192

Ranking of funds/sponsors 201-1,000

Rank	Fund/sponsor	Location	Assets
748.	Tecumseh Products	Tecumseh, Mich.	192
749.	Longshoremen	New Orleans	191
750.	McDonald's	Oak Brook, Ill.	190
751.	Carolina Power & Light	Raleigh, N.C.	190
752.	First Boston	New York	190
753.	Illinois Carpenters	Geneva, Ill.	190
754.	Kerr-McGee	Oklahoma City	190
755.	Springs Industries	Fort Mill, S.C.	190
756.	Texasgulf	Stamford, Conn.	190
757.	Salt River Project	Phoenix, Ariz.	188
758.	Texas Gas Trans.	Owensboro, Ky.	188
759.	Steelworkers Natl. HQ	Pittsburgh	187
760.	Daniel International	Greenville, S.C.	187
761.	Curtiss-Wright	Lindhurst, N.J.	186
762.	Alaska Laborers	Seattle	185
763.	American Hoechst	Somerville, N.J.	185
764.	Cargill	Minneapolis	185
765.	Hearst	New York	185
766.	Peabody Holding	St. Louis	185
767.	Varian Associates	Palo Alto, Calif.	185
768.	ARKLA	Shreveport, La.	185
769.	National Gypsum	Dallas	182
770.	N. Dakota Employees	Bismarck	180
771.	Hawaiian Electric	Honolulu	179
772.	Laborers #22	Boston	177
773.	Upholsterers Intl. HQ	Philadelphia	176
774.	Utah Power & Light	Salt Lake City	176
775.	Ohio Iron Workers	Charleston, W. Va.	175
776.	Arco Babcock	Fairfield, Conn.	175
777.	Birmingham City	Alabama	175
778.	Illinois Tool Works	Chicago	175
779.	Morrison-Knudsen Co.	Boise, Idaho	175
780.	St. Paul Teachers	Minn.	175
781.	C.W. Sweeney	Dublin, Calif.	174
782.	Auto Workers Natl. HQ	Detroit	174
783.	Torchmark	Birmingham, Ala.	174
784.	Rochester Telephone	Rochester, N.Y.	173
785.	Frontier Airlines	Denver	173
786.	Ohio Casualty	Hamilton, Ohio	173
787.	W. Pa. Laborers	Pittsburgh	173
788.	K.C. Power & Light	Missouri	172
789.	Pechiney	Greenwich, Conn.	171
790.	Interco	St. Louis	171
791.	H.&G.L. Local 472-172	Newark, N.J.	170
792.	Stanley Works	New Britain, Conn.	170
793.	Pacific Maritime Assoc.	San Francisco	170
794.	ACF Industries	Earth City, Mo.	169
795.	Moorman Mfg.	Quincy, Ill.	169
796.	Cessna Aircraft	Wichita, Kan.	169
797.	Portland General Elec.	Oregon	169
798.	Todd Shipyards	New York	168
799.	American Insurance	New York	167
800.	Marin County	San Rafael, Calif.	167
801.	Oakland County	Pontiac, Mich.	167
802.	Black & Decker	Towson, Md.	166
803.	Michigan Laborers	Lansing	166
804.	Associated Dry Goods	New York	165
805.	Republic Airlines	Minneapolis	165
806.	Texas Iron Workers	Houston	165
807.	Pittston	Greenwich, Conn.	164
808.	Natl. Industrial Group	Florham Park, N.J.	164
809.	Adolph Coors	Golden, Colo.	164
810.	US Fidelity & Guaranty	Baltimore	163
811.	Santa Fe International	Alhambra, Calif.	163
812.	Acme-Cleveland	Cleveland	163
813.	Combined Insurance	Chicago	163
814.	Harsco	Camp Hill, Pa.	163
815.	Oper. Eng. #825	West Orange, N.J.	163
816.	Sybron	Rochester, N.Y.	163
817.	Ernst & Whinney	Cleveland	163
818.	Signode Industries	Glenview, Ill.	161
819.	Northern Telecom	Nashville, Tenn.	161
820.	Nashville/Davidson Co.	Tenn.	160
821.	Puget Sound P&L	Bellevue, Wash.	160
822.	Duquesne Light	Pittsburgh	160
823.	Brown Group	St. Louis	159
824.	Castle & Cooke	San Francisco	159
825.	Ozark Air Lines	St. Louis	159
826.	NVF	Miami Beach, Fla.	159
827.	Hersey Products	Dedham, Mass.	158
828.	MAPCO	Tulsa, Okla.	158
829.	Marmon Group	Chicago	158
830.	S. Ohio Iron Workers	Dayton	158
831.	Foster Wheeler	Livingston, N.J.	158
832.	Building Service Trust	San Francisco	157
833.	Wis. Public Service	Green Bay, Wis.	157
834.	Austin Employees	Texas	157
835.	Wm. Wrigley Jr.	Chicago	157
836.	American Petrofina	Dallas	156
837.	Mich. Blue Cross	Detroit	155
838.	M.A. Hanna	Cleveland	155
839.	Major League Players	New York	155
840.	Wang Laboratories	Lowell, Mass.	155
841.	Producer-Writers Guild	Burbank, Calif.	155
842.	Tandy	Fort Worth, Texas	154
843.	Dravo	Pittsburgh	154
844.	Federal Express	Memphis, Tenn.	153
845.	Arkansas Highway	Little Rock	153
846.	Mid-Jersey Truck#701	N. Brunswick, N.J.	153
847.	Oakland Police & Fire	Calif.	152
848.	Commercial Credit	Baltimore	152
849.	St. Joe Minerals	Clayton, Mo.	152
850.	W. Mich. Int. Medicine	Gr. Rapids, Mich.	152
851.	K.C. Blue Cross	Kansas City, Mo.	152
852.	Farley/Northwest Ind.	Chicago	151
853.	Arthur Young U.S.	New York	151
854.	Shelby County	Memphis, Tenn.	151
855.	New York Times	New York	150
856.	Actors Equity/Extras	New York	150
857.	Atlantic City Electric	Pleasantville, N.J.	150
858.	Carpenters Locals/Ill.	Springfield, Ill.	150
859.	Org. of Amer. States	Washington	150
860.	Royal Indemnity	New York	150
861.	S. Calif. Clerks	Los Angeles	150
862.	TBG	New York	150
863.	S. Calif. Auto Club	Los Angeles	149
864.	Witco Chemical	New York	149
865.	Hotel/Rest. Local #165	Las Vegas, Nev.	149
866.	Amer. Water Works	Haden Heights, N.J.	149
867.	Dayton Power & Light	Dayton, Ohio	149
868.	Clothing & Textile Natl.	New York	148
869.	Syntex	Palo Alto, Calif.	148
870.	PaineWebber Group	New York	148
871.	SKF Industries	King of Prussia, Pa.	148
872.	Dennison Mfg.	Waltham, Mass.	147
873.	S. Carolina E&G	Columbia	146
874.	Commonwealth Energy	Cambridge, Mass.	146
875.	Western Pa. Laborers	Pittsburgh	146
876.	Thomas J. Lipton	Englewood Cl., N.J.	146
877.	Richardson-Vicks	Wilton, Conn.	145
878.	Lone Star Industries	Greenwich, Conn.	144
879.	Tyler	Dallas	144
880.	N. N.J. Iron Workers	Newark	143
881.	Barnes Group	Bristol, Conn.	143
882.	Continental Grain	New York	142
883.	Witco Corp.	Woodcliff Lake, N.J.	142
884.	Courier-Journal	Louisville, Ky.	141
885.	San Antonio Fire/Police	Texas	141
886.	Santa Barbara County	Calif.	141
887.	Dow Jones & Co.	Princeton, N.J.	140
888.	Hiram Walker & Sons	Detroit	140
889.	Iron Workers #25	Detroit	140
890.	Simpson Timber	Seattle	139
891.	Stanadyne	Windsor, Conn.	139
892.	Knoxville City	Tenn.	138
893.	K.C. Public Schools	Kansas City, Mo.	138
894.	Pa. Municipal	Harrisburg	138
895.	Media General	Richmond, Va.	136
896.	S. Cal. Plasterers	El Monte, Calif.	138
897.	Masonite	Chicago	137
898.	Figgie International	Richmond, Va.	137
899.	Banco Popular	Hato Rey, P.R.	136
900.	Machinist #701	Chicago	136
901.	ARA Services	Philadelphia	135
902.	Copperweld	Pittsburgh	135
903.	Leo Burnett	Chicago	135
904.	Minnegasco	Minneapolis	135
905.	Bell & Howell	Skokie, Ill.	135
906.	W.W. Grainger	Skokie, Ill.	135
907.	Bulova Watch	Flushing, N.Y.	135
908.	Auto Machinist #289	Seattle	134
909.	Louisiana Pacific	Portland, Ore.	133
910.	MEBA Dist. 2	Brooklyn, N.Y.	133
911.	Food Workers #174	New York	132
912.	A.B. Dick	Chicago	132
913.	TECO Energy	Tampa, Fla.	131
914.	Ampco Pittsburgh	Boston	131
915.	Questar	Salt Lake City	131
916.	Plumbers National HQ	Washington	131
917.	Clevepak	Purchase, N.Y.	131
918.	Arvin Industries	Columbus, Ind.	131
919.	PACCAR	Bellevue, Wash.	130
920.	Carpenters Intl. HQ	Tacoma, Wash.	129
921.	Food Wrkrs. #1001	Seattle	129
922.	Copley Press	La Jolla, Calif.	128
923.	N. Calif. Laborers	San Francisco	128
924.	Revere, Copper	Stamford, Conn.	128
925.	Warner Comm.	New York	128
926.	Longshoremen ILA	Baltimore	128
927.	Iron Workers	Pasco, Wash.	127
928.	Service Empl. #144	New York	127
929.	Wisconsin Gas	Milwaukee	127
930.	ConAgra	Omaha, Neb.	127
931.	Eagle-Picher Ind.	Cincinnati	127
932.	Houston Natural Gas	Houston	127
933.	Teamsters #282	Elmont, N.Y.	127
934.	A.E. Staley Mfg.	Roll. Meadows, Ill.	127
935.	N'western Steel & Wire	Sterling, Ill.	127
936.	Dan River	Danville, Va.	127
937.	Cannon Mills	Kannapolis, N.C.	126
938.	United Brands	New York	126
939.	Oper. Eng. #15	New York	126
940.	Phila. Iron Workers	Philadelphia	125
941.	Lincoln Electric	Cleveland	125
942.	Indianapolis Power	Indianapolis	125
943.	Parker-Hannifin	Cleveland	125
944.	Central Illinois Light	Peoria	124
945.	Dayco	Dayton, Ohio	124
946.	Carpenters #1310	St. Louis	124
947.	TPF&C	Philadelphia	124
948.	Grand Union	Elmwood Park, N.J.	124
949.	Amica Mutual Insur.	Providence, R.I.	123
950.	Thyssen-Bornemisza	New York	123
951.	Oper. Eng. #542	Norristown, Pa.	123
952.	MCA	Universal City, Calif.	123
953.	S. Cal. Food Wrkrs.	Los Angeles	123
954.	Genstar	San Francisco	122
955.	Hartmarx	Chicago	122
956.	Police/Fire	Gr. Rapids, Mich.	122
957.	Andersen	Bayport, Minn.	122
958.	Toledo Edison	Ohio	122
959.	Richmond Supplement	Virginia	122
960.	Machinists #67	Washington	121
961.	American Greetings	Cleveland	120
962.	American Intl. Group	New York	120
963.	Masco	Taylor, Mich.	120
964.	Molders Allied Workers	Cincinnati	120
965.	Sheller-Globe	Toledo, Ohio	120
966.	Siemens Capital	New York	120
967.	AMF	White Plains, N.Y.	119
968.	Cenex	St. Paul, Minn.	119
969.	Dillon Companies	Hutchinson, Kan.	119
970.	Louisville G&E	Kentucky	119
971.	St. Louis Police	St. Louis	118
972.	Bucyrus-Erie	Milwaukee	118
973.	Enterprise Association	L. Island City, N.Y.	118
974.	Indiana State Laborers	Terre Haute	118
975.	Srs. of Mercy/Detroit	Farmington Hills, Mich.	117
976.	Iron Workers Intl.	Washington	117
977.	Cooper Tire & Rubber	Findlay, Ohio	117
978.	Yellow Freight System	Overland Park, Kan.	117
979.	Charter	Jacksonville, Fla.	117
980.	Laborers #253	Jacksonville, Ill.	117
981.	Reliance Group	New York	117
982.	Ill. Hotel/Rest. Empl.	Naperville	117
983.	S. Diego Co. Carp.	San Diego, Calif.	116
984.	Teamsters #83	Richmond, Va.	116
985.	Western Air Lines	Los Angeles	113
986.	Iowa-Ill. G&E	Davenport, Iowa	112
987.	Longview Fibre	Longview, Wash.	111
988.	Foxboro	Foxboro, Mass.	111
989.	Cons. Freightways	Palo Alto, Calif.	110
990.	Manitowoc	Manitowoc, Wis.	110
991.	Sonoma County	Santa Rosa, Calif.	109
992.	Jack Eckerd	Clearwater, Fla.	109
993.	YWCA	New York	109
994.	Kansas City Empl.	Missouri	108
995.	West Point Pepperell	West Point, Ga.	108
996.	S. Calif. Lumber Ind.	Los Angeles	106
997.	East Bay Muni. Utility	Oakland, Calif.	104
998.	Homestake Mining	San Francisco	103
999.	N.Y. Stock Exchange	New York	103
1000.	Shenango Furnace	Pittsburgh	100

On the following pages, *Pensions & Investment Age* presents sketches of the nation's 200 largest pension funds. Included are highlights of news events from 1985 and a list of money managers and key personnel for the Top 100 funds. The allocation of assets for all 200 funds is also presented. All information is © 1986 Crain Communications Inc.

a

Retirement Systems of Alabama

	($ millions)
otal assets	4,744
Defined benefit	4,744
mployer contributions	255
enefit payments	203

MONTGOMERY, Ala. — The Retirement Systems of Alabama created a $100 million internally managed stock index fund modeled on the Standard & Poor's 500 in January 1985. It boosted that amount to nearly $175 million in spring.

The $4.744 billion (book value) fund also invested $25 million in floating-rate mortgage-backed securities issued by MGIC Mortgage Marketing Corp.

The fund is managed in-house. It estimated 1985 contributions would total $255 million, an increase of more than 24% from the $205 million contribution in 1984, and benefit payments would be $203 million, an increase of $12 million.

As of Sept. 30, the fund's book value grew 15.8% from the year before, when it had $4.095 billion in pension assets.

The fund has $20 million in GICs, $4.1 million in equity real estate and $210.5 million in mortgages.

The state retirement systems comprise the Teachers Retirement System with $3.23 billion; the Employees Retirement System, $1.47 billion; and the Judicial Retirement Fund, $43 million.

The systems' asset mix was 7.3% stocks, 52.7% bonds, 9.3% cash equivalents, 25.8% mortgage-backed securities, 4.4% mortgages, 0.1% real estate equity and 0.4% GICs.

Key investment personnel are David G. Bronner, chief executive officer; Hunter Reaves, director of fixed income; and Cheryl Duke, director of equities.

State of Alaska Retirement Systems

	($ millions)
Total assets	2,185
Defined benefit	2,185
Employer contributions	197
Benefit payments	66

JUNEAU, Alaska — The State of Alaska Retirement Systems' assets increased 31.4% in the 12 months ended Sept. 30, to $2.185 billion from $1.663 billion. Officials said the jump was due to both investment performance and increased contributions.

Contributions for all of 1985 increased 9.4% to $197 million from 1984's $180 million, while benefit payments increased 19.4% to $86 million from $72 million.

During the year the fund added a real estate manager, Karsten, giving it eight managers in that area.

The fund increased its allocation to equities about 43% and tripled its investments in foreign markets, without changing any managers. Both actions were in response to market conditions. The foreign investments, which total $117 million, expanded to include $36 million in fixed income. The fund also phased out investments in mortgage-backed securities. It has $157 million in real estate equity and $499 million in mortgages.

The retirement systems runs $1.585 billion in-house: $1.364 billion in fixed-income and $221 million in short-term investments. Fixed-income futures are used.

As of Sept. 30, the asset mix was 20.3% stocks, 39.6% bonds, 10.1% cash equivalents, 7.2% real estate equity and 22.8% mortgages.

Equity managers: Fred Alger; Alliance; INVESCO; Lehman; Citibank; Morgan Guaranty.

Real estate managers: Aetna; Hancock; Prudential; Equitable; Security Capital; JMB; Morgan Guaranty; Karsten.

First Pennsylvania Bank is master custodian.

James R. Wilson, Kenneth L. Shaffer and Martin Lentz are state investment officers.

Allied-Signal Inc.

	($ millions)
Total assets	6,000
Defined benefit	4,000
Defined contribution	1,700
Other	300
Employer contributions	na
Benefit payments	na

MORRIS TOWNSHIP, N.J. — The pension funds of Allied Corp. and The Signal Cos. continued to be run in separate master trusts following the 1985 merger of the two companies into Allied-Signal Inc.

Allied-Signal subsequently announced it will spin off 28 business units into a new company, which will have as much as $1.1 billion in pension assets.

As of Sept. 30, Allied-Signal had $6 billion in employee benefit assets: $4 billion in defined benefit assets; $1.7 billion in defined contribution assets; and $300 million in foreign and overseas pension assets.

Of the total, $750 million is managed internally: $200 million in stocks; $400 million in bonds; and $150 million in short-term investments. Some of the fund's venture capital investments also are under in-house management.

The fund has $200 million invested in an indexed equity fund managed by Bankers Trust, and a $1 billion immunized bond portfolio. It has $150 million in international equities and $50 million in international bonds.

About $200 million is in real estate equity, $20 million in oil and gas and $10 million in venture capital.

Its pension asset mix as of Sept. 30 was 46% stocks, 32% bonds, 10% cash equivalents, 7% real estate equity and 5% international equities.

Equity managers: Bankers Trust; BMI Capital; Baron Capital; C-S Capital; Capital Guardian; Chesapeake Capital; Corinthian Capital; Delaware Investment; Thomas J. Herzfeld; Johnson, Valliant & Broadfoot; KR Capital; Kurtz Capital; John A. Levin; Lieber; Lincoln Capital; Lord, Abbett; Lynch & Mayer; Presidio Management; Primecap; Donald Smith; Target Investors; Thomson, Horstmann & Bryant; Verus Capital; Weiss, Peck & Greer; Westport Asset Management.

Bond managers: Mellon Bank; Morgan Guaranty; Solomon Asset Management.

Real estate managers: Aetna; Equitable; John Hancock; Prudential; RREEF; Travelers.

International managers: Arnhold & S. Bleichroeder; Batterymarch-International; Morgan Grenfell.

Options manager: Balch, Hardy & Scheinman.

The fund's master trustees are Northern Trust, State Street Bank, Chase Manhattan and Bank of America.

The key investment officer is

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American Airlines

($ millions)	
Total assets	2,275
Defined benefit	1,382
Defined contribution	853
401(k)	40
Employer contributions	105
Benefit payments	70

FORT WORTH, Texas — American Airlines continued to break new ground in its pension management practices by using three discount brokers to execute a portion of a $50 million program trade in summer.

About 70% of the trade was executed by Salomon Brothers. The other 30% was directed to Charles Schwab, Fidelity Investments Brokerage Services and Abel Noser.

In September, American added balanced managers Barrow, Hanley, Mewhinney & Strauss and Hotchkis & Wiley to its fixed benefit fund. Independence Investment Associates was hired as equity manager. Capital Guardian Trust was hired as equity manager for the American variable plan for pilots.

Tom Stawicki came to American in February as director-trust investments from Rexnord Corp.

Total employee benefit assets increased 19%, to $2.275 billion as of Sept. 30, from $1.912 billion a year ago.

The fund runs $900 million internally: $50 million in equity and $850 million in fixed income.

The approximate asset mix for pension assets as of Sept. 30 was 15% stocks, 40% bonds, 9% cash equivalents, 1% GICs and 5% mortgage-backed securities.

The fund has $850 in dedicated or immunized bonds, $20 million invested in GICs, $50 million in foreign equity, $20 million in foreign fixed income and $100 million in mortgages.

Equity managers: Barrow, Hanley, Hotchkis & Wiley; United Capital; Citicorp; Dewey Square; Capital Guardian; Vilas-Fischer; Atlanta Capital; Independence.

Options manager: Analytic Investments.

Balanced managers: Hotchkis & Wiley; Barrow, Hanley; Brown Brothers Harriman; Penmark; RepublicBank Dallas; Capital Guardian; Vilas-Fischer.

International managers: Morgan Grenfell; Rowe Price-Fleming; N.M. Rothschild.

Master trustee is RepublicBank Dallas. Chase Manhattan is the international custodian.

Key personnel are William F. Quinn, assistant treasurer; Thomas Stawicki, director of trust investments; and Robert J. Chiori, senior analyst-investments.

American Information Technologies Corp.

($ millions)	
Total assets	8,300
Defined benefit	7,400
Thrift or savings	370
401(k)	530
Employer contributions	200
Benefit payments	400

CHICAGO — Ameritech's employee benefit assets rose 18.6% to $8.3 billion as of Sept. 30 from $7 billion a year ago. Defined benefit assets increased 15.6%, to $7.4 billion from $6.4 billion.

Company officials attributed the increase to market performance. The fund swelled even though Ameritech paid out $400 million in benefits in 1985, twice as much as it contributed to the pension plan.

In 1985, Ameritech's pension fund hired its first international and venture capital managers and switched several domestic equity managers.

In international, it added ABD International, IDS International, Capital Guardian, Baring International and First Chicago Investment Advisors. In venture capital, it hired Goldar Thoma, Contennial Fund, Robertson Colman & Stephens and William Blair Venture Partners, among others.

As part of changes made in domestic equity managers inherited from American Telephone & Telegraph Co.'s fund, Ameritech hired Concord Capital, David J. Greene, National City Bank and Sit Associates; it dropped Central National Bank, Harris, Lazard Freres, Fischer Francis Trees & Watts, Scudder Stevens, Babson, Brown, Stein Roe, Equitable, T. Rowe Price, Mathers, National Bank of Detroit and Thorndike.

In July, Ameritech reoptimized the $2.4 billion dedication it set up in late 1984. In addition, it increased its stock-index fund investments to $540 million from $200 million, while dropping its $100 million in GICs.

Its asset mix as of Sept. 30 was 54% stocks, 38% bonds, 1% cash equivalents and 7% real estate equity. Among its assets are $52 million in venture capital, $203 million in foreign stocks and $227 million in foreign fixed income, $540 million in indexed stocks and $2.4 billion in dedicated or immunized bonds.

Equity managers: AmeriTrust; Concord Capital; David J. Green; Delaware Investment Advisors; First Wisconsin; Jennison Associates; Lincoln Capital; Loomis Sayles; Lord Abbett; National City Bank; Rosenberg; Sit Associates; Wells Fargo.

Bond managers: American Fletcher; First Chicago Investment Advisors; Indiana National; National Investment Services.

Real estate manager: AT&T's TREET.

International managers: ABD International; IDS International; Capital Guardian; Baring International; First Chicago.

Venture capital managers: Goldar Thoma; Continental Fund; Robertson Colman & Stephens; William Blair.

401(k) managers: Bankers Trust, INVESCO.

Ameritech's master trustee for its pension fund is Harris Trust & Savings Bank and for its 401(k), Northern Trust.

Overseeing the fund are: Donald W. Phillips, director-investment management; Jim A. Kujaca, manager-investment planning and research; and Ken F. Feld, manager-investment analysis.

American Telephone & Telegraph Co.

($ millions)	
Total assets	24,887
Defined benefit	21,035
Thrift or savings	3,852
Employer contributions	662
Benefit payments	603

NEW YORK — AT&T completed the divestiture of pension assets for the seven new Bell companies in July.

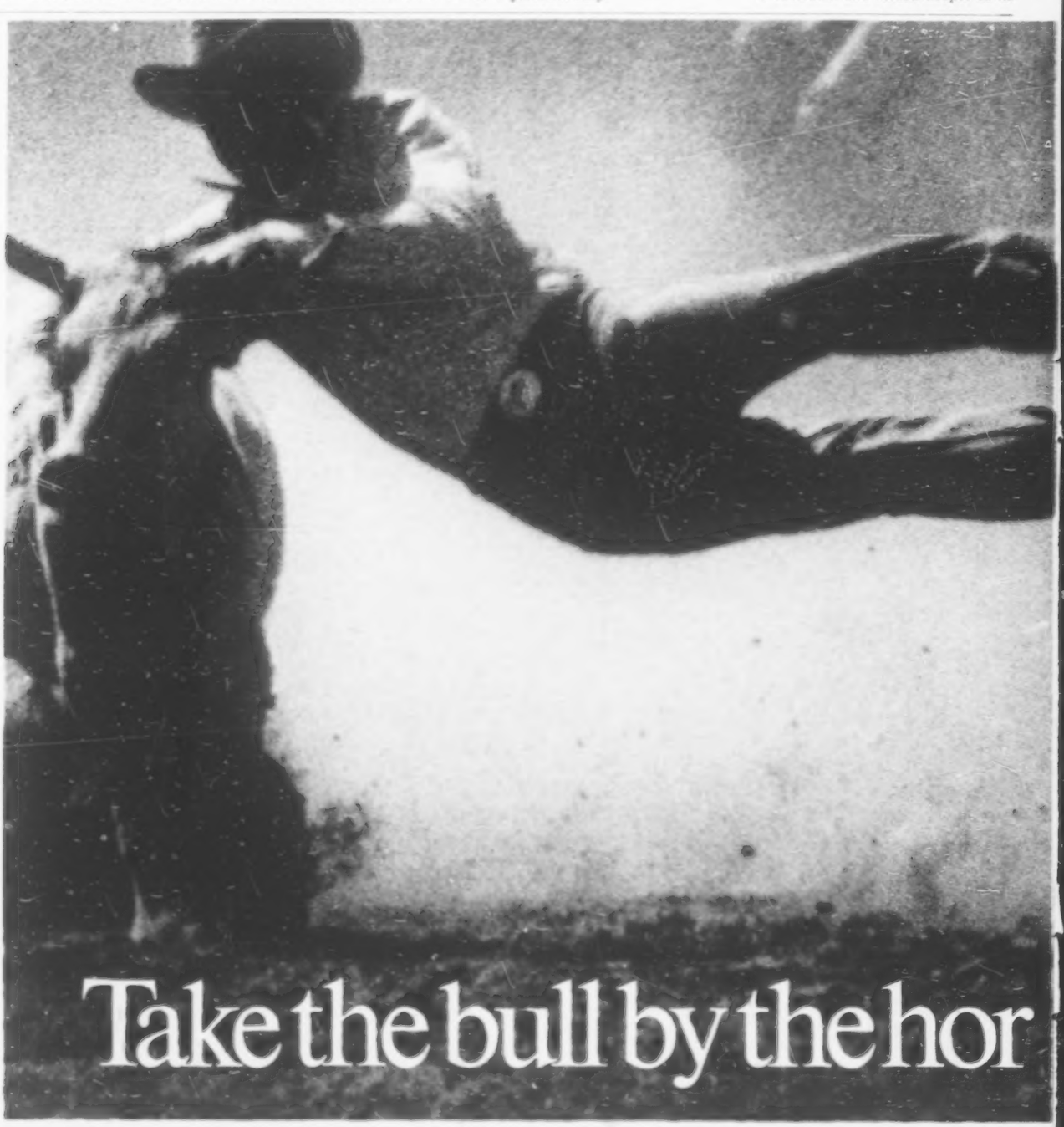
As of Sept. 30, AT&T had $24.887 billion in total employee benefits assets, up 16% from the $21.455 billion post-divestiture estimate it had made the previous year.

Defined benefit plan assets were $21.035 billion, up 16.9% from last year's estimate. Thrift and savings plan assets as of Sept. 30 were $3.852 billion.

During 1985, the AT&T fund, along with General Motors Corp.'s pension plan, reportedly became the first funds to take a direct interest in a large portfolio of existing shopping centers. The two pension funds lent the money to Detroit shopping center magnate A. Alfred Taubman.

AT&T pension officials also planned to start pumping more money into oil and gas investments in preparation for committing up to 2% of its total pension fund to that area by 1989.

It replaced Bankers Trust-Investment Management Group as custodian and record keeper of its



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employee savings plan with American Transtech, a Jacksonville, Fla., unit of AT&T.

Employer contributions to the plan in 1985 were estimated at $662 million, while $603 million was expected to be paid out to retirees during the year.

The pension fund has $6.1 billion in an internally run stock index portfolio, and $2.922 billion in indexed bond investments. Foreign equity investments totaled $551 million; venture capital commitments, $290 million; oil and gas ventures, $241 million; and equity real estate, $2.011 billion.

As of Sept. 30, AT&T's asset mix was 53% stocks, 31% bonds, 10% equity real estate, 3% international, 2% venture capital and 1% oil and gas investments.

Managers: Aldrich, Eastman & Waltch; ABD International; Bankers Trust; Batterymarch; Boston Energy Advisors; Boston Co.; Brown Brothers Harriman; Capital Guardian; Chase Investors; Citibank; Coldwell Banker; Corporate Property Investors; Copley Advisors; David L. Babson; Denver Investment; Eastdil; Equitable Investment; Favia, Hill; FNB Atlanta; FNB Chicago; Fidelity International; GT Capital; Goldman, Sachs; Griffin Group; John Hancock; J.W. O'Connor; Heitman; Interfirst Bank of Dallas; Investment Counselors of Maryland; Jennison Associates; Lincoln Capital; Loomis, Sayles; Lord, Abbett; Manufacturers Hanover; Mercantile Trust; Mellon Bank; Morgan Grenfell; Morgan Guaranty Trust; NCNB; Provident Capital; Pacific Investment; Prudential; Rosenberg Capital; RREEF; Standish, Ayer & Wood; State Street Research; Seattle First; Thorndike, Doran, Paine & Lewis; United Capital; U.S. Trust; Wachovia; Wells Fargo Bank; Western Asset.

Overseeing the fund are David P. Feldman, corporate vice president; and Robert E. Angelica and Ronald R. Roessler, directors.

Amoco Corp.

($ millions)	
Total assets	3,540
Defined benefit	1,785
Thrift or savings	1,366
401(k)	181
Other	208
Employer contributions	229
Benefit payments	177

CHICAGO — The employee benefit assets of Amoco Corp., formerly Standard Oil Co. (Indiana), increased 12.5%, to $3.54 billion from $3.144 billion for the year ended Sept. 30. Pension assets alone increased about 9.5%.

Employer contributions increased 9% to $229 million, while benefit payments decreased 26% to $177 million.

During the year, the fund terminated a fixed-income account with Hoisington Asset Management and moved the money in-house.

Of the pension assets, $479 million is managed internally: $331 million in equities, $64 million in fixed income, $23 million in short-term investments and $61 million in other instruments, such as venture capital limited partnerships.

The fund has $138 million in indexed stocks, $112 million invested in foreign markets — $91 million in stocks, $5 million in fixed income and $16 million in other securities — and $94 million in real estate. It uses fixed-income futures.

As of Sept. 30, the pension asset mix was 65% stocks, 10% bonds, 10% cash equivalents, 5% real estate equity, 2% mortgage-backed securities and 8% other, including foreign equities and venture capital.

Equity managers: Chase Manhattan; CMB Investment; Dimensional Fund Advisors; Fidelity Management; Franklin Portfolio; McKenzie Walker; Fayez Sarofim; State Street Research; Forstmann-Leff.

Bond managers: Pacific Investment; Solomon Asset.

Real estate manager: Equitable.

International managers: Ivory & Sime; Fidelity International.

Chase Manhattan is master trustee.

Key personnel overseeing the investment management of the funds are Philipp W. Binzel, assistant treasurer-investments, and John S. Ruey, administrative manager-investments.

Arizona State Retirement System

($ millions)	
Total assets	4,103*
Defined benefit	4,103
Employer contributions	132
Benefit payments	139

*as of June 30, 1985

PHOENIX, Ariz. — The Arizona State Retirement System experienced a 34% increase in assets to $4.103 billion on June 30 from $3.063 billion the previous year. Fund officials point to superior market performance and a total rate of return in excess of 30% as the primary reasons for the dramatic increase.

Arizona hired Duff & Phelps Investment Management Co., Chicago, during the second quarter to run a $378 million portfolio of zero-coupon bonds.

The fund has approximately $523 million invested in indexed equity funds and $191 million in indexed bonds.

Arizona increased its equities commitment to 43% from 33% of assets, and slightly lowered its fixed-income and cash holdings.

The system's asset mix on June 30 was 43% stocks, 41% bonds, 9% real estate equity and 7% mortgages. It includes mortgage-backed securities in bonds.

Balanced managers: Bernstein-Macaulay; Criterion; Fiduciary Trust; Gardner & Preston Moss; INVESCO; Kemper Financial; Wells Fargo.

Bond manager: Duff & Phelps.

Mortgages: Valley National Bank.

Approximately $250 million in short-term instruments is managed internally.

Mellon Bank is the system's custodial bank.

Key personnel are Max Sullivan, director, and Charles Moody, assistant director.

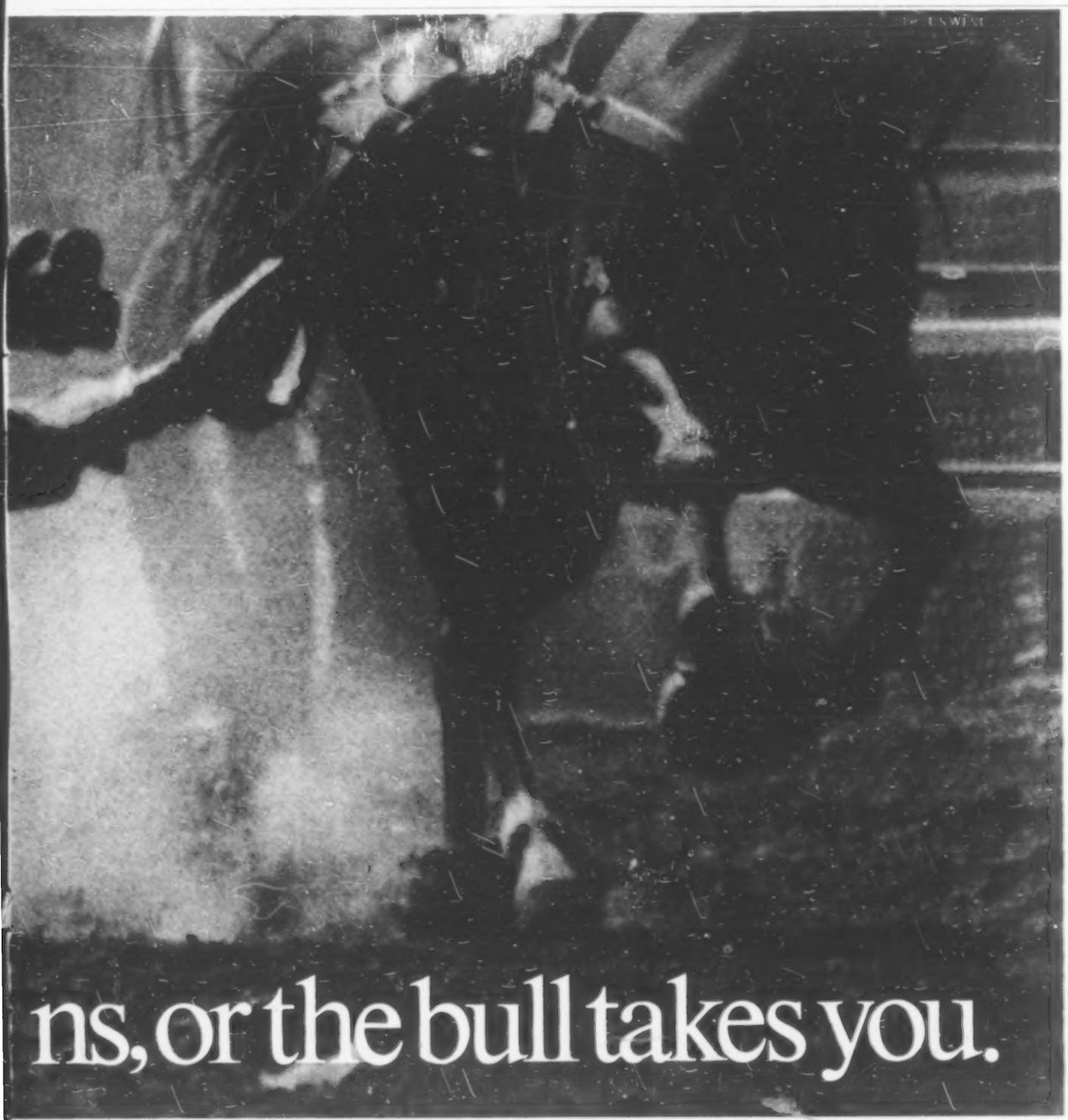
Atlantic Richfield Co.

($ millions)	
Total assets	3,250
Defined benefit	2,200
Profit-sharing	260
401(k)	790
Employer contributions	111
Benefit payments	n/a

LOS ANGELES — Atlantic Richfield Co. total employee benefit assets increased 14.4% to $3.25 billion, according to recent Money Market Directory figures, from $2.84 billion as of Sept. 30, 1984.

Pension assets alone rose 7.3%, to $2.2 billion from the previously reported $2.05 billion. Another $260 million is in a profit-sharing plan and $790 million is in a 401(k) plan.

Atlantic Richfield executives announced in August that the company would liquidate holdings from its pension plan to meet immediate benefit expenses resulting



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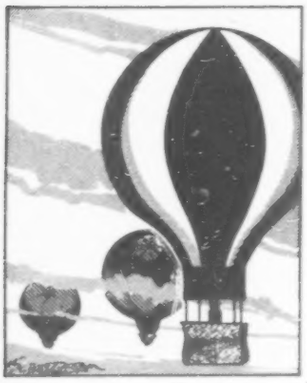

from a company early retirement offer.

Officials said the company would increase its annual pension contribution in 1985 by about $11 million, to $111 million, to cover increased employee benefit liabilities resulting from that offer.

Also during 1985, Howard Ockelmann announced he would retire as investment officer in charge of the pension plan. He was succeeded by E. Kent Damon Jr., formerly vice president of planning and control for Arco Transportation Co.

Managers (according to Money Market Directory): J.P. Morgan; G.T. Capital; Fidelity International; Payden & Rygel; Solomon; Merrill Lynch Hubbard; Rowe Price-Fleming; Warburg Investment; Aldrich, Eastman & Waltch; Capital Guardian; TCW Asset; Crocker National Bank; Citicorp; Fiduciary Trust.

b

Bell Atlantic Corp.

($ millions)

Total assets	8,000
Defined benefit	7,000
Thrift or savings	1,000
Employer contributions	na
Benefit payments	na

PHILADELPHIA — Defined benefit assets at Bell Atlantic Corp. increased 40% in the year ended Sept. 30, to $7 billion from $5 billion, largely because of the final transfer of assets to Bell Atlantic and the other baby Bells from American Telephone & Telegraph Co.

Total employee benefit assets increased 27% to $8 billion as of Sept. 30, from $6.3 billion a year earlier.

Roughly $7 billion was in a defined benefit plan and $1 billion was in a thrift or savings plan.

During 1985, Bell Atlantic took its first look at international investments, reportedly hiring three international equity managers, including Capital Guardian Trust, late in the year.

The company reported it had $1 billion in indexed stocks and $100 million in venture capital.

The last known managers for Bell Atlantic were:

Equity managers: Batterymarch; Alliance; Lord, Abbett; Mercantile Safe Deposit; Pioneering Management; Prudential; Thorndike, Doran, Paine & Lewis; Wellington Management.

Fixed-income managers: Wentworth, Hauser & Violich; Sovran Bank; Pacific Investment Management; Miller, Anderson & Sherrerd; Mercantile Trust; Brown Brothers Harriman; Harris Trust; Putnam Advisory.

Balanced managers: AmeriTrust; Bankers Trust; Equitable; IDS Advisory; State Street Research.

Mellon Bank is the master trustee for the fund.

During the year, William O. Albertini was named secretary-treasurer for Bell Atlantic. Mr. Albertini and Edward Rennie, director-trust investment management, share investment management responsibility.

BellSouth Corp.

($ millions)

Total assets	6,983
Defined benefit	6,150
Thrift or savings	833
Employer contributions	256
Benefit payments	259

ATLANTA — In 1985, BellSouth Corp. received its final infusion of assets as a result of the divestiture of American Telephone & Telegraph Co. Total employee benefit assets increased 26.9% to $6.983 billion as of Sept. 30, up from $5.5 billion the previous year.

The $833 million in savings plan assets includes 401(k) plan assets. The company did not disclose its asset mix.

The BellSouth fund received $256 million in employer contributions in 1985 and paid out $259 million in benefits.

BellSouth invests a portion of its assets in GICs, but did not disclose the amount or the names of the managers.

BellSouth has several investment managers that were not listed in last year's profile. They are: Brown Brothers Harriman; Dimensional Fund Advisors; First Kentucky Co.; First Union National Bank; Jennison; Loomis, Sayles; State Street Bank; and The Vanguard Group.

Managers: AmSouth; AT&T Divestiture Trust; Bankers Trust; Batterymarch; Citizens and Southern National Bank; First Tennessee Investment Management; NCNB; Pacific Investment; South Carolina National; and TREET.

The master trustee for the pension fund is Wachovia Bank & Trust. The master trustee for the savings plans is Bankers Trust.

Kincaid Patterson, director-trust assets, oversees the investment of the assets.

Bethlehem Steel Corp.

($ millions)

Total assets	2,601
Defined benefit	2,601
Employer contributions	na
Benefit payments	450

BETHLEHEM, Pa. — Bethlehem Steel Corp. froze its underfunded defined benefit plan for non-represented, salaried employees and established a defined contribution plan effective Jan. 1. The move is expected to save the company $30 million annually.

At the time of the freeze, the plan had an unfunded liability of $209 million.

Bethlehem Steel's pension assets increased about 11.3% during the year ended Sept. 30, to $2.601 billion.

In 1985, benefits paid to retirees were an estimated $450 million. Employer contributions for 1985 were not available.

The company manages 99% of its pension assets internally. Of that amount, $798 million is in equities, $1.327 billion is bonds, $77 million is short term and $373 million is in other asset classes, including GICs, mortgage-backed securities and mortgages.

Bethlehem has $26 million in international equities; $1.327 billion in dedicated bond funds; $57 million in GICs; $73 million in mortgage-backed securities; and $380 million in mortgages.

The asset mix as of Sept. 30 was 32% stocks, 51% bonds, 3% cash, 2% GICs, 3% mortgage-backed securities, and 9% in owed and unpaid employer contributions.

International managers: J.P. Morgan; Putnam International.

Morgan Guaranty is master trustee for the plan.

Walter W. Buckley Jr. is pension fund manager.

An in-depth look at investment advisers runs May 19.

Boeing Co.

($ millions)

Total assets	5,509
Defined benefit	3,534
401(k)	1,975
Employer contributions	73
Benefit payments	132

SEATTLE — Boeing Co. employee benefit assets totaled $5.509 billion as of Sept. 30, an increase of 11.3% from the $4.948 billion reported the previous year.

The fund received an estimated $73 million in employer contributions, and paid out $132 million in benefits.

Early in 1985, it was announced Boeing had hired Cabanne Smith Associates as an equity manager.

As of Sept. 30, the asset mix for the pension plan was 48.4% stocks, 25.9% bonds, 13.7% cash equivalents, 10.3% real estate equity, 1.1% in mortgage-backed securities and 0.6% in other assets.

Equity managers: Alliance; Cabanne Smith; Chase Investors; Sit Investment; First Interstate Bank of Washington; IDS Advisory; INVESCO; Cashman Farrell; Capital Guardian; Rosenberg Capital; Century Capital; Citicorp; Sirach/Flynn Elvins.

Bond managers: Robert C. Brown; Seattle First National Bank; W.R. Huff; McKee Investment Management; PIMCO; Morgan Guaranty.

Real estate managers: Security Pacific; Aetna; Prudential; First Chicago.

Chase Manhattan Bank is the master trustee.

Key investment personnel are Gary Bland, director-trust investments and investor relations, and Elizabeth A. Marcoux, manager-trust investments.

c

California Public Employees' Retirement System

($ millions)

Total assets	29,166
Defined benefit	29,166
Employer contributions	2,000
Benefit payments	1,300

SACRAMENTO, Calif. — The California Public Employees' Retirement System's pension assets totaled $29.166 billion as of Sept. 30, a 28.4% increase from the $22.717 billion reported the previous year.

During 1985, Greta E. Marshall signed a three-year contract as investment manager of the retirement system. She had been president of BayBanks Investment Management, Boston.

The fund has an estimated $5 billion in indexed stocks, $1.636 billion in real estate equity and $8.731 in mortgages.

As of Sept. 30, the asset mix for the system was 30% stocks, 31.2% bonds, 3.7% cash equivalents, 5.5% real estate equity, 8.8% mortgages and 20.8% mortgage-backed securities.

All assets are managed internally, although two equity and three real estate managers serve in advisory or consulting roles.

Equity advisers: Bankers Trust, Citibank.

Real estate advisers: F.I.A. Associates, Equitable Real Estate Investment and LaSalle Advisors.

Custodian for the system is the state treasurer's office.

Ms. Marshall, and Walton Williams, principal investment officer, are the key investment management officials.

California State Teachers' Retirement System

($ millions)

Total assets	15,100
Defined benefit	15,100
Employer contributions	622
Benefit payments	360

SACRAMENTO, Calif. — The California State Teachers' Retirement System pension assets totaled $15.1 billion as of Sept. 30, an increase of 22.8% from the $12.3 billion reported a year earlier.

In 1985, trustees hired a permanent chief investment officer, Thomas E. Flanigan, and a new chief executive officer, Larry Kurmel.

Four equity managers also were hired: Barrow, Hanley, Mewhinney & Strauss; Provident Capital; Trinity; Wilmington Capital.

As of Sept. 30, the asset mix was 31.1% stocks, 57.3% bonds, 7.2% cash equivalents, 2.5% real estate equity and 1.9% mortgages.

The fund has $2.2 billion in indexed stocks; $329 million in real estate equity and $800 million in mortgages.

Equity managers: Alliance; Barrow Hanley; Dimensional Fund Advisors; Provident Capital; TCW; Trinity; Wells Fargo Investment Advisors; Wilmington.

Bond managers: Loomis, Sayles; Manufacturers Hanover; Miller, Anderson & Sherrerd; Pacific Investment; Scudder, Stevens; Stein Roe & Farnham; T. Rowe Price.

Real estate manager: Eastdil.

Mr. Flanigan is the key investment management official.

University of California Retirement System

($ millions)

Total assets	5,700
Defined benefit	5,200
401(k)	500
Employer contributions	na
Benefit payments	na

BERKELEY, Calif. — The University of California Retirement System's employee benefit assets totaled $5.7 billion as of Sept. 30, a 35.7% increase from the $4.2 billion reported the previous year.

Much of the increase came as a result of returns from investments in the stock market. The fund had 82% of its assets in equities as of Sept. 30. It also had 12.6% in bonds, 2.8% in cash equivalents, 0.2% in mortgages, 0.4% in mortgage-backed securities and 2% in venture capital.

All assets are managed in-house. The fund has $10 million in mortgages and $91 million in venture capital.

Key personnel overseeing the investment management are Herbert N. Gordon, treasurer, and Patricia A. Small, associate treasurer.

Caterpillar Tractor Co.

($ millions)

Total assets	3,048
Defined benefit	2,699
Defined contribution	285
Profit-sharing	2
401(k)	41
Other	21
Employer contributions	na
Benefit payments	na

PEORIA, Ill. — Caterpillar Trac-

Profile statistics at a glance

	1985 ($ billions)	1984 ($ billions)
Top 1,000 assets	$1073.0	$861.6
Top 200 assets	812.4	641.4
Top 100 assets	675.6	581.8
Top 50 assets	523.7	399.8
Top 25 assets	377.6	286.1
Top 200 defined benefit	648.5	576.9
Top 200 defined contribution	75.9	NA
Top 200 profit-sharing	12.8	NA
Top 200 thrift	31.9	NA
Top 200 401(k)	16.2	NA

Top 200 fund statistics

	1985 ($ billions)	1984 ($ billions)
Assets managed in-house	$339.1	$263.8
Stock index funds	75.6	30.1
Bond index funds	10.3	NA
Equity real estate	23.3	15.7
Mortgages	36.8	16.0
Mortgage-backed securities	30.8	18.8
GICs	12.0	11.7
Overseas	11.7	7.7
Venture capital	2.6	NA
Dedication/immunization	23.0	17.2
Oil & gas	0.6	NA
Contributions paid	42.4	30.2
Benefits paid	31.1	27.7

Number of top 200 funds using alternative investments

	1985	1984
Stock index funds	77	53
Bond index funds	18	NA
GICs	62	78
Overseas investments	78	77
Real estate equity	121	138
Mortgage-backed securities	67	64
Mortgages	70	NA
Options (stock)	49	59
Stock index futures	45	NA
Fixed-income futures	38	NA
Venture capital	63	56
Oil & gas	17	26
Dedicated or immunized funds	42	39
Options (fixed income)	18	NA
Internal	117	128

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tor Co.'s employee benefit assets increased 9.6% in the year ended Sept. 30, to $3.048 billion from $2.782 billion. About $21 million of the assets are in an employee stock ownership plan.

Caterpillar set up an $890 million dedicated bond portfolio during the year. Chase Investors and J.P. Morgan manage the portfolio, while Aetna Life & Casualty, using a system developed by Leland O'Brien Rubinstein, employs a futures strategy called dynamic hedging to lock in the actuarially assumed rate of return on the dedicated fund and increase equity exposure as interest rates decline.

The fund uses stock options, stock index futures and fixed-income futures. It has $198 million in real estate equity and about $160 million in international equity. The commitment to oil and gas rose 168%, to $26 million from $9.7 million a year earlier. A spokeswoman for the fund said there was no specific reason for the increased investment.

Equity managers: Chase Investors; Citicorp; Equitable Investment Management; Institutional Capital; Jennison; J.P. Morgan; Oppenheimer; State Street Research and Management; Thorndike, Doran, Paine & Lewis.

Bond managers: Chase Investors; J.P. Morgan.

Real estate managers: Aetna; First Chicago; LaSalle Street Fund; Travelers.

International managers: Baring International; Fidelity International.

Northern Trust is master trustee.

Fred V. Dickinson is manager-risk management and employee benefit funds; V.A. Kane is benefit funds coordinator.

Chevron Corp.

	($ millions)
Total assets	6,003*
Defined benefit	3,751
Defined contribution	828
Profit-sharing	1,424
Employer contributions	105
Benefit payments	551

*P&I Age estimate

SAN FRANCISCO — The combined employee benefit assets of Chevron Corp. and Gulf Oil Corp., which merged in 1985, rose 13.8% to $6 billion in the 12 months ended Sept. 30, according to a *Pensions & Investment Age* estimate based on Dec. 31, 1984 figures provided by Chevron.

The contributions of $105 million and benefit payments of $551 million listed above are for 1984.

The Chevron and Gulf funds are run in separate master trusts. A merger of the funds is planned for early in 1986.

Both funds made several manager changes during the year. Chevron dropped Bankers Trust and Crocker Investment Management as equity managers. It also phased out most of its commitment to the Crocker Real Estate Equity Fund.

Gulf terminated MacKay-Shields as an equity manager and hired Mellon Capital Management as a balanced manager. It no longer uses Mellon Capital for real estate.

As of Sept. 30, the approximate asset mix for the combined trusts was 44.5% stocks, 33.6% bonds, 2% cash equivalents, 5.5% real estate equity, 13.7% GICs and 0.7% mortgages.

The funds have $593.3 million in a dedicated bond portfolio, $456.2 million in GICs, $181.7 million in real estate equity and $24.1 million in mortgages. Fixed-income futures are used.

Equity managers (Chevron): Sanford C. Bernstein; Equitable Investment Management; Provident; Rosenberg Capital; Stralem.

(Gulf): Avatar; Cambiar; Estabrook; Jennison Associates; Lynch & Mayer; Mellon Capital; Putnam Advisory; Rollert & Sullivan; Rosenberg Management; Winchester.

Bond managers (Chevron): Degnan & Gillespie; Equitable; Pacific Investment; STW Fixed Income Management.

(Gulf): Pacific Investment; Mellon Bank; Mellon Capital; State Street Research.

Real estate managers (Chevron): Prudential; RREEF; Travelers Account R.

Bankers Trust is Chevron's master trustee; Mellon Bank, Gulf's.

Key personnel are Sellers Stough, vice president-finance; G.K. Carter, comptroller; and R.G. Williamson, deputy comptroller.

Chicago Teachers' Retirement Fund

	($ millions)
Total assets	2,074*
Defined benefit	2,074
Employer contributions	175
Benefit payments	100

*as of Aug. 31, 1985

CHICAGO — Assets of the Pub

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lic School Teachers' Pension and Retirement Fund of Chicago increased 24.3%, to $2.074 billion as of Aug. 31 from $1.668 billion as of Sept. 30, 1984.

Employer contributions increased 70%, going to $175 million in 1985 from 1984's $103 million. Benefit payments remained the same: $100 million.

The fund is managed internally; Capital Supervisors advises on equities and fixed income.

The approximate asset mix as of Aug. 31 was 48.9% stocks, 44.7% bonds and 6.4% cash equivalents. The fund invests in mortgages, real estate equity and oil and gas, but specific amounts were not available.

Key investment personnel are James F. Ward, executive director, and A. Lee Thurow, president of Capital Supervisors.

Chrysler Corp.

	($ millions)
Total assets	2,497
Defined benefit	2,346
Thrift or savings	151
Employer contributions	570
Benefit payments	369

DETROIT — Chrysler Corp.'s employee benefit assets rose 14.2% to $2.497 billion as of Sept. 30 from $2.186 billion the previous year. Defined benefit assets increased 38.3%, to $2.346 billion from $1.696 billion.

The company attributed the increase in pension assets to market performance of its bond portfolios.

Its contributions rose 25% to $570 million in 1985 from $456 million the previous year, mainly because of a new labor contract. Benefit payments remained about the same, with $369 million in 1985, up slightly from $360 million the previous year.

As part of a labor agreement, the company is ending its employee stock ownership plan and distributing its $560 million in assets to employees. As a result, its total savings assets fell to $151 million in 1985 from $490 million.

During 1985, Chrysler hired Pacific Asset Management, its first equity manager since putting most of its pension assets into dedicated bond funds in 1984. It assigned Pacific Asset $10 million to run in a special equity portfolio.

Its asset mix as of Sept. 30 was 71% bonds, 24% cash equivalents, 4% real estate equity and less than 1% in stocks. Among its assets are $1.9 billion in dedicated portfolios, which consist of bonds and some cash equivalents, and $79 million in real estate equity.

Chrysler uses stock and bond options and stock-index and fixed-income futures.

Equity manager: Pacific Asset Management.

Bond managers: Manufacturers Hanover; Irving Trust; J.P. Morgan Investment Management; National Bank of Detroit; Trust Co. of the West; Bankers Trust.

Real estate managers: Prudential Insurance; RREEF; Eastdil; JMB.

401(k) managers: Massachusetts Mutual Life (GICs); Merrill Lynch (equity and fixed income).

Chrysler manages $570 million in pension assets in-house, consisting of $120 million in fixed income, $430 million in short-term investments and $20 million in annuities.

Its master trustee is Bankers Trust.

Overseeing the fund are: Frederick W. Zuckerman, vice president and treasurer; Joseph L. Arpin, assistant treasurer-banking; and Russell P. Flynn, manager-pension fund administration.

Public Employees Retirement Association of Colorado

	($ millions)
Total assets	5,024
Defined benefit	5,024
Employer contributions	355
Benefit payments	180

DENVER — Total tax-exempt assets for the fund increased by $916 million, or 22.2%, to $5.024 billion as of Sept. 30, from $4.108 billion a year earlier.

In June, the fund hired Nancy Williams as a deputy executive director.

Employer contributions were about $355 million; benefits paid out to retirees were about $180 million.

The asset mix as of Sept. 30 was 45% stocks; 30% bonds; 8% cash equivalents; 2% real estate equity; 2% GICs; and 13% mortgages.

The fund invested $103 million in GICs; $15 million in venture capital; $100 million in real estate equity; and $800 million in mortgages. The fund uses stock options.

The state treasurer is custodian of the fund. Norman Jaskol is deputy executive director of the fund.

The State of Connecticut Trust Funds

	($ millions)
Total assets	3,684
Defined benefit	3,684
Employer contributions	450
Benefit payments	295

HARTFORD, Conn. — The State of Connecticut Trust Funds grew 23.7% in the 12 months ended Sept. 30, to $3.684 billion from $2.979 billion a year earlier.

The trust fund recently completed a major restructuring of its equity portfolio. This involved hiring 10 new managers and dropping all but two of its seven former managers.

The fund added Aetna; Bankers Trust; Concord Capital; Franklin Portfolio Associates; Glickenhaus; Oppenheimer Capital; Provident Capital; Phoenix Investment Counsel; Roanoke; Siebel Capital.

It retained Capital Guardian Trust and Wright Investors and dropped David L. Babson, Bernstein-Macaulay, Connecticut Bank & Trust, Connecticut National Bank and CIGNA.

It also added real estate eq
managers Morgan Bank; J
McMahan; Heitman; JMB/Stat
Aldrich; RREEF; Public Storag

Equity managers: Aetna; B
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Glickenhaus; Oppenheimer C
tal; Provident Capital; Phoenix
vestment Counsel; Roanoke; Si
Wright Investors'.

Bond managers: Scudder,
vens & Clark; Lehman; Loo
Sayles; Bear, Stearns.

Real estate managers: Ae
CIGNA; Phoenix Mutual; Tra
ers; Morgan Bank; John McMa
Heitman; JMB/State St. Aldr
RREEF; Public Storage.

The fund manages $1.331 bi

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-house: $468 million in mortgage
curities; $630 million in fixed in-
me; and $233 in short-term se-
rities.
As of Sept. 30, it had $74 million
GICs, $413 million in real estate
uity and $398 million in mort-
ges.
The asset mix was 36.1% stocks,
.5% bonds, 6.3% cash equivalents,
.2% in real estate equity, 2% in
ICs and 10.9% in mortgage-
cked securities.
Key personnel are Frank
cDermott, deputy treasurer-in-
stments; Terry Helming, invest-
ent officer-fixed; Harold John-
n, investment officer-short-term;
d Robert Staley, investment offi-
r-real estate.

d

elta Air Lines Inc.

	($ millions)
tal assets	2,250
Defined benefit	2,000
Thrift or savings	250
Employer contributions	na
nefit payments	na

ATLANTA — During 1985, elta Air Lines invested in a ven-re capital limited partnership run Welsh, Carson, Anderson & owe.
The fund also is invested in a rstmann, Little leveraged buy-t pool.
New England Mutual, Travelers d Vanguard, which had run ICs for Delta, no longer are em-oyed in that capacity.
According to the 1986 Money arket Directory, McKenzie, alker handles stocks, bonds, GICs d international investments for e fund.
The fund has about 25 managers, rgan Grenfell and Globe Finlay n international equities.
As of Sept. 30, employee benefit sets rose to $2.25 billion, up 25% m a year earlier when assets re $1.8 billion.
Pension assets alone rose 25% to billion, up from $1.6 billion in 84.
The pension asset mix was 50% cks, 30% bonds, 15% cash equiva-nts, 5% GICs.
In addition, $35 million was in-sted in venture capital and $90 llion in foreign stocks. The fund s stock options.
Harris Trust is the master stee.
Overseeing the fund's invest-nts are Frank Chew, treasurer; mes Taylor, assistant treasurer-vestment management; and mes Mathews, supervisor-invest-nt management.

etroit Retirement Systems

	($ millions)
tal assets	2,469*
Defined benefit	2,469
nployer contributions	152
nefit payments	154

*As of June 30, 1985

DETROIT — The Detroit Retire-ent Systems, which comprise the neral Retirement System and e Police & Fire Retirement Sys-ms, recorded a 22.2% increase in nployee benefit assets for the ar ended June 30, to $2.469 llion from $2.021 billion a year rlier.
In spring, the $1.2 billion general stem assigned $310 million to five lanced managers: Oppenheimer pital; The Boston Co.; Harbor pital; Marquette Capital Man-ement; and Munder Capital Man-ement.
Funding for the move came from rminating Alliance Capital, re-cing Comerica Bank-Detroit's count and cash.
Oppenheimer and Marquette al-ready handled equity for the Police & Fire Retirement System.
Employer contributions for the year ended June 30 were $152 million; benefits payments for the same period totaled $154 million.
The systems manage $142 million in short-term assets internally.
Of the $2.5 billion in pension assets, $331 million is in GICs; $2 million in international securities, split evenly between equity and fixed income; $20.6 million real estate equity; $230 million in mortgages; and $6.6 million in venture capital.
The asset mix of the fund was 20% stocks, 29% bonds, 11% cash equivalents, 1% real estate equity, 14% GICs, 10% mortgages, 9% mortgage-backed securities and 6% construction loans.
Equity managers: Loomis, Sayles; Scudder, Stevens & Clark; Comerica.
Bond managers: Putnam Capital; Loomis, Sayles; Scudder, Stevens & Clark.
Balanced managers: Oppenheimer; Marquette; Harbor; Boston Co.; Munder.
Real estate managers: Mellon Real Estate; Mortgage Investors Advisory Group.
The custodian for the general fund is Comerica Bank-Detroit, and for the police and fire fund, Manufacturers National Bank-Detroit.
Fred Murphy, executive secretary, and Del Berryhill, administrative assistant, oversee investment management of the funds.

Largest corporate funds

($ millions)

Fund	Assets
General Motors	$ 26,300
AT&T	24,887
General Electric Co.	15,812
IBM Corp.	13,939
Ford Motor Co.	11,000
E.I. du Pont de Nemours & Co.	9,665
NYNEX Corp.	9,447
Ameritech	8,300
Exxon Corp.	8,008
U.S. Steel Corp.	8,000
Bell Atlantic Corp.	8,000
BellSouth Corp.	6,983
GTE Corp.	6,740
Pacific Telesis Group	6,316
Chevron Corp.	6,004
Allied-Signal Inc.	6,000
U S WEST	5,675
Eastman Kodak	5,582
Boeing Co.	5,509
United Technologies Corp.	5,500
Sears, Roebuck & Co.	5,481
Rockwell International	5,218
Shell Oil Co.	4,979
McDonnell Douglas Corp.	4,914
Southwestern Bell Corp.	4,616
Mobil Oil Corp.	4,553
Total	**$227,428**

Largest public funds

($ millions)

Fund	Assets
California Public Employees	$ 29,166
New York State Common Fund	25,997
N.Y.C. Retirement Systems	25,063
New York State Teachers' Retirement	15,303
California State Teachers	15,100
New Jersey Division of Investment	12,494
Texas Teachers	11,270
Wisconsin Investment Board	10,800
Ohio Public Employees	10,760
Michigan State Employees	10,516
Ohio State Teachers Retirement	10,178
Florida Dept. of Administration	8,911
North Carolina Employees	8,773
Pennsylvania Public School	7,825
Minnesota State Board	6,800
Washington State Board	6,749
Georgia State Systems	6,053
L.A. County Employees	5,747
Pennsylvania State Employees	5,418
Oregon Public Employees	5,100
Colorado Public Employees	5,024
Maryland State System	5,020
South Carolina System	4,980
Alabama Retirement Systems	4,744
Virginia Supplemental System	4,509
Total	**$262,300**

E.I. du Pont de Nemours & Co. Inc.

	($ millions)
Total assets	9,665
Defined benefit	7,841
Thrift or savings	1,709
401(k)	17
Other	98
Employer contributions	269
Benefit payments	533

WILMINGTON, Del. — The E.I. du Pont de Nemours & Co. Inc. pension plan set up an internally managed, $1.215 billion indexed stock portfolio Jan. 1, 1985.
The retirement plan also invested $17 million in an unspecified real estate mutual fund. The rest of the fund is run in-house.
Employer contributions to all plans dropped to $269 million in 1985 from $390 million the year before, a drop of 31%. The drop was due to the boosting of the actuarial assumption to 9% from 7.5%. Benefit payments, however, increased to $533 million from $400 million.
As of Sept. 30, total employee benefit assets grew 19%, to $9.665 billion from $8.12 billion. Pension assets increased 17.4% from the year before, growing to $7.841 billion from $6.678 billion.
The retirement plan uses stock-index and fixed-income futures and bond options. It also had $404 million invested in foreign equities, up from $272 million in 1984.
The asset mix for the pension fund was 68% stocks, 11% bonds, 10% cash equivalents and 11% mortgage-backed securities, as of Sept. 30.
Wilmington Trust is master trustee.
Savings plan assets grew 18.5%; they reached $1.7 billion as of Sept. 30, up from $1.44 billion the year before. A 401(k) plan feature added in 1984 accounted for $17 million.
Outside managers for the savings plan are Bankers Trust for equities and Equitable Life for fixed-income.
Overseeing investments are David F. Marvin, vice president-pension fund investment department, and A.H. Nehrling Jr., director-employee benefits.

e

Eastman Kodak Co.

	($ millions)
Total assets	5,582*
Defined benefit	4,511
401(k)	1,071
Employer contributions	141
Benefit payments	210

*P&I Age estimate

NEW YORK — Based on Eastman Kodak's reported total of $4.995 billion in employee benefit assets as of Dec. 31, 1984, *Pensions & Investment Age* estimates the funds totaled $5.582 billion as of Sept. 30, 1985. That represents a 9.4% increase from last year's estimate of $5.1 billion.
In 1984, Eastman Kodak contributed $141 million to its pension plan and paid $210 million in benefits.
The company invests an estimated $223 million in equity real estate, $1.23 billion in annuities and $781 million in GICs.
Eastman Kodak also invests in indexed stock funds, foreign equity, oil and gas and venture capital, but did not disclose any amounts.
As of Dec. 31, 1984, the asset mix was 56% stocks, 2% cash equivalents, 4% real estate equity, 14% GICs, 22% annuities and 2% combined in oil and gas and venture capital.
Equity managers: American National Bank & Trust; Analytic; Batterymarch; Fidelity Management Trust; Kemper; McKenzie Walker; J.P. Morgan; Neuberger & Berman; T. Rowe Price; Rogers, Casey & Barksdale; Sanford Bernstein; State Street Research; Templeton; TCW; Value Line; and Waddell & Reed.
Real estate managers: Aetna; Equitable; Goldman, Sachs; JMB; and RREEF.
GIC managers: John Hancock and Metropolitan.
Venture capital manager: Horsley, Keogh & Associates.
Private investments: Cawley, Gillespie & Associates.
Boston Safe Deposit & Trust Co. is the fund's master trustee.
Key personnel overseeing the investment of the fund are Russell L. Olson, director-pension investments, and A. Duff Lewis Jr., pension investment coordinator.

Exxon Corp.

	($ millions)
Total assets	8,008
Defined benefit	4,627
Thrift or savings	3,161
401(k)	220
Employer contributions	113
Benefit payments	300

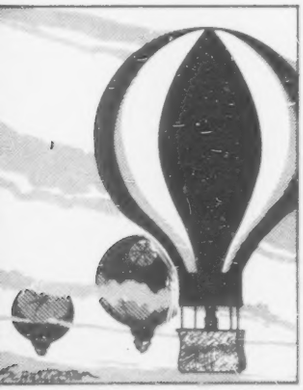
NEW YORK — Exxon Corp.'s total employee benefits assets increased 8.4% in the year ended Sept. 30, to $8.008 from $7.388 billion. Defined benefit plan assets climbed 3.2% to $4.627 billion from $4.484 billion. The well-funded status of the plan enabled Exxon to reduce employer contributions by about 74% to $114 million in 1985 from $437 million in 1984. Benefit payments increased slightly, to $300 million from $280 million.
The company manages $2.305 billion in pension assets internally: $1.868 billion in stocks; $251 million in bonds; and $186 million in short-term instruments.
Exxon has $1.326 billion of its pension assets in an indexed stock portfolio; $226 million is invested in international equities; $610 million is committed to equity real estate; $60 million to venture capital; and $41 million to oil and gas.
Exxon also uses stock options and stock index futures.
The asset mix of the pension fund as of Sept. 30 was 58% stocks, 11% bonds, 13% equity real estate, 4% cash equivalents, 12% annuities and 2% venture capital and oil and gas combined.
Equity managers: Citibank; First City National Bank; RepublicBank Dallas; Wells Fargo Investment Advisors; Morgan Grenfell; State Street Bank.
Bond managers: Scudder, Stevens & Clark; State Street Research.
Real estate managers: Prudential Asset; Equitable Life; Aetna Life; Corporate Property Investors; InterFirst Bank Dallas.
Annuities: Prudential Insurance; Equitable; Travelers Insurance; John Hancock Life; and Aetna.
Irving Trust is master trustee.
Key investment personnel are C.W. Williams, assistant treasurer; T.M. Castagna, manager-benefits financing; and M.F. Hoben, manager-trust investments.

f

Florida State Board of Administration

	($ millions)
Total assets	8,911
Defined benefit	8,911
Employer contributions	891
Benefit payments	416

TALLAHASSEE, Fla. — Assets of the Florida State Board of Administration rose 26.8% to $8.911 billion as of Sept. 30 from $7.029 billion at the same time a year earlier.
The board's contributions increased 14.2% to $891 million in 1985 from $780 million in 1984. Its benefit payments increased 13.7% to $416 million in 1985 from $366 million the year earlier.
In 1985, the board switched a stock-index manager, dropping Bankers Trust and hiring Wells Fargo. Also, it switched an active equity manager, hiring Prudential Asset Management and releasing Bernstein-Macaulay. The board dropped one of its three options overwrite managers, Travelers' Investment Management.
Also, the board did not consummate the hiring of two domestic equity managers, Bessemer Trust and Hutton Capital, and two international fixed-income managers, BAIMCO and Morgan Grenfell.
Its asset allocation as of Sept. 30 was 44.9% stocks, 27.8% bonds, 5.2% cash equivalents, 6.9% real estate equity, 15.2% mortgage-backed securities. Among its assets are $88 million in foreign-denominated fixed income; $1.1 billion is in a domestic stock-index fund and $612 million in real estate equity.
The board runs $4.643 billion in-house, consisting of $1.992 billion in equities, $2.191 billion in fixed income and $460 million in short-term investments.
It uses stock options and stock index futures.
Equity managers: Wells Fargo; Westridge; INVESCO; Lazard Freres; Eagle; Stein Roe & Farnham; Alliance; Barrow Hanley Me-



whinney & Strauss; Southeastern; Fred Alger; Pioneer; Delaware Investment; Batterymarch; Prudential Asset.

Bond managers: Alliance; Thorndike Doran Paine & Lewis.

Real estate managers: Equitable, Aetna; FNB Boston; John Hancock; First Chicago Investment Advisors; Prudential; Goldman, Sachs; LaSalle.

Options managers: Bear, Stearns; Balch Hardy & Scheinman.

Its custodian is Citibank.

Overseeing the fund are E.J. Felton, executive director, and Thomas Fox, deputy executive director-investments.

Ford Motor Co.

($ millions)	
Total assets	11,000
Defined benefit	9,500
Defined contribution	1,500
Employer contributions	650
Benefit payments	700

DEARBORN, Mich. — Ford Motor Co. increased its allocation to GICs by 175% to $1.1 billion in 1985 from $400 million in 1984. Company officials would not comment on the increase.

Ford's total employee benefit assets increased by 18.3% during the year ended Sept. 30, to $11 billion from $9.3 billion a year earlier. The $1.5 billion in defined contribution assets are split between the company's 401(k) and TRASOP plans.

In 1985, Kenneth C. Merrill was named head of pension fund investments, replacing Robert C. White who retired April 1.

Earlier in 1985, the company hired one investment manager — PRIMECAP — and released two — Harris Trust & Savings Bank and Rollert & Sullivan.

For its defined benefit plan, the company reported $650 million in employer contributions and $700 million in benefits paid to retirees for 1985.

In addition to the $1.1 billion in GICs, the fund's passive investments include-$1.6 billion in indexed stocks and $300 million in dedicated or immunized bonds.

The fund manages $600 in fixed-income internally. It also has invested $250 million in foreign equity, $80 million in foreign fixed income, $50 million in venture capital, $25 million in oil and gas and $70 million in real estate equity.

The fund also reported using fixed-income futures.

The approximate asset mix of the fund as of Sept. 30 was 61% stocks, 14% bonds, 7% cash, 1% real estate equity, 12% GICs and 5% mortgage-backed securities.

Equity managers: Alliance; Capital Guardian; Chase Investors; Citicorp; Dewey Square; Fidelity Management Trust; GeoCapital; Hathaway Associates; Manufacturers National Bank Detroit; Mitchell Hutchins; J.P. Morgan; PRIMECAP; RepublicBank Dallas; Sarofim Trust; Siebel Capital; Sit Investment; and State Street Research.

Fixed-income managers: Capital Guardian; Citicorp; Dewey Square; J.P. Morgan; T. Rowe Price; Sarofim Trust; State Street Research.

Manufacturers National Bank of Detroit is the fund's master trustee.

Key personnel overseeing the investment management of the fund are K.C. Merrill, executive director-corporate planning and trust management, and M.E. Maertens, manager-trust investment.

Largest union funds

($ millions)

Fund	Assets
Teamsters, Western Conference	$ 5,929
Teamsters Central States SE & SW	5,775
United Mine Workers Assoc.	3,938
Electrical Workers IBEW Dist. 10	1,648
Boilermakers and Blacksmiths	1,604
Bakery & Conf. Union & Industry	1,317
International Union of Oper. Engineers	1,241
I.A.M. National Pension Fund	959
Total	**$22,411**

Largest miscellaneous funds

($ millions)

Fund	Assets
TIAA-CREF	$ 40,000
University of California	5,700
United Nations Joint Staff	4,354
United Methodist Pension Fund	1,945
Illinois St. University Retirement	1,886
Tennessee Valley Authority	1,676
Southern Baptist Church Annuity Board	1,600
National Rural Electric Coop. Assoc.	1,475
World Bank	1,461
Presbyterian Church -Bd. of Pensions	1,104
Episcopal Church	1,010
Total	**$62,211**

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General Dynamics Corp.

($ millions)	
Total assets	03,300
Defined benefit	2,100
Defined contribution	1,200
Employer contributions	190
Benefit payments	60

NEW YORK — General Dynamics experienced a $600 million, or 22.2%, growth in employee benefit assets in the 12 months ended Sept. 30, to $3.3 billion from $2.7 billion.

The fund made no changes to its investment management lineup during the period, according to Charles Walbrandt, a staff vice president.

Equity managers: Alliance; Anderson, Hoagland; Campbell Advisors; Citibank; Miller, Anderson & Sherrerd; Neuberger & Berman; Provident Investment Counsel; Lindner Management; Lazard Freres; A.M. Kailing; Jundt/Capen; First Pacific Advisors; Equitable; Delaware Investment; Frank Russell Trust; Seibel Capital; Sit Investment; TCW Asset Management.

Bond managers: BAIMCO; Centerre; Chase Investors; Discount Corp. of New York; Bankers Trust.

GIC managers: Aetna; Equitable; Hancock; Metropolitan; Mutual Benefit; Travelers.

The company also runs about $600 million in-house in fixed income, a 500% increase from 1984. It reduced its GIC investment to $200 million from $400 million.

The asset mix as of Sept. 30 was 31% stocks, 46% bonds, 13% cash equivalents and 10% GICs.

The master trustee is Chase Manhattan.

John P. Maguire is vice president and secretary. Mr. Walbrandt is staff vice president-employee benefit trust investments.

General Electric Co.

($ millions)	
Total assets	15,812
Defined benefit	12,866
Thrift or savings	2,726
Other	220
Employer contributions	700
Benefit payments	470

STAMFORD, Conn. — The acquisition of RCA Corp. by General Electric Co., pending as 1985 drew to a close, caused widespread speculation about whether the pension funds would merge. The effect of the merger on the two funds is expected to be resolved in 1986.

In April 1985, GE set up an $824 million dedicated portfolio, enabling the company to cut its pension contribution $28 million and the present value of its liabilities $580 million.

In 1985, officials of the pension trust revealed they had reduced equity real estate exposure 20% to 25% during an 18-month period in the course of restructuring that portfolio in response to a sluggish, uncertain market. Fund officials have been restructuring its mortgage commitment to get out of non-participating mortgages.

GE was among the pension funds that committed $178 million to a venture capital fund formed by Welsh, Carson, Anderson & Stowe. That brought its venture cap commitment to $313 million.

Total employee benefit assets increased 18.5% to $15.812 billion in the year ended Sept. 30, while defined benefit assets increased 20% to $12.866 billion.

GE runs essentially all of its pension assets internally: $5.4 billion in equities; $4 billion in fixed income; $316 million in short-term instruments; and $2.7 billion in other types of investments, including real estate, private placements and venture capital.

About $1.6 billion is in an indexed stock portfolio. Another $1.078 billion is dedicated or immunized, while $247 million is invested in GICs.

The GE fund has $460 million invested internationally, $362 million of which is in equities. Those assets are run by several outside managers, but GE would not identify them.

In addition, it has $478 million in real estate equity and $1.23 billion to mortgages.

GE also uses stock options and stock index and fixed-income futures.

The asset mix as of Sept. 30 was 46% stocks, 30% bonds, 4% cash equivalents, 4% equity real estate, 2% GICs, 10% mortgages and 4% mortgage-backed securities.

Chase Manhattan Bank is GE's master trustee.

D.F. Frey, vice president-investments, oversees the plan along with investment managers A.S. Bahr and F.X. Tansey.

General Motors Corp.

($ millions)	
Total assets	26,300
Defined benefit	22,900
Thrift or savings	3,000
Other	400
Employer contributions	2,488
Benefit payments	na

NEW YORK — General Motors Corp. hired five new managers in 1985: Barrow, Hanley, Mewhinney & Strauss; Batterymarch; Fidelity Management Trust; Lazard Freres Asset Management; and Travelers Hill Samuel.

The company had $26.3 billion in employee benefit assets as of Sept. 30, 1985, an increase of 15.3% from the $22.799 billion *Pensions & Investment Age* estimated it had a year earlier.

Defined benefit plan assets grew 12.9% to $22.9 billion from the estimated $20.275 billion. GM's contribution of about $2.5 billion is as of Dec. 31, 1984.

As part of its international investment activities, General Motors reportedly committed at least $150 million to a fixed-income account with a global mandate in late 1985. Some thought the move was a shorter-term currency play rather than a long-term international commitment.

Aside from international, General Motors has assets committed to real estate investments, venture capital and oil and gas ventures. It also runs a small percentage of assets internally. The company declined to reveal specific numbers.

Managers: ABD International; Aetna; Aldrich, Eastman & Waltch; American National Bank and Trust; AmeriTrust; Bank of America; Bankers Trust; Baring International; Barrow, Hanley, Mewhinney & Strauss; Batterymarch; The Boston Co.; The Boston Co. Real Estate Council; Capital Guardian Trust; Chase Manhattan; Citibank; Daiwa International; Dimensional Fund Advisors; Fidelity International; Fidelity Management; FNB Boston; FNB Chicago; G.T. Capital; Harris Trust & Savings Bank; InterFirst Bank of Dallas; INVESCO; Jennison Associates; Kleinwort Benson International; Landauer Advisors; Lazard Freres; Lincoln Capital; Mellon Bank; Metropolitan Life; Morgan Grenfell; Morgan Guaranty; National Bank of Detroit; Nomura Capital; Prudential Asset Management; Rowe Price-Fleming International; N.M. Rothschild International; Schroder Capital; TCW Asset Management; Travelers Hill Samuel; United Capital Management; Weiss, Peck & Greer; Wells Fargo Bank.

Master trustees are Bankers Trust, Mellon and Chase Manhattan.

W. Gordon Binns Jr. is chief investment funds officer and R. Charles Tschampion is director-investment manager relations.

Georgia State Retirement Systems

($ millions)	
Total assets	6,053
Defined benefit	6,053
Employer contributions	445
Benefit payments	278

ATLANTA — Total assets for the combined Employee Retirement System and Teachers' Retirement System increased 28.2% to $6.053 billion as of Sept. 30, from $4.723 billion a year earlier.

The funds are managed in-house with equity firms serving in an advisory capacity.

Equity advisers: Citizens & Southern (teachers' fund only); FNB Atlanta (employees' fund only); Trusco Capital Management; INVESCO; Thorndike, Doran, Paine & Lewis.

There was $3 million invested in real estate equity and $36 million in mortgages.

The asset mix as of Sept. 30 was 37% stocks; 54% bonds; 5% cash equivalents; 1% mortgages; and 3% mortgage-backed securities.

Citizens & Southern is the custodian for the teachers' fund. FNB Atlanta is custodian for the employees' fund.

Key personnel are Graham Lynch, director-division of investment services; C.W. Cary, assistant director; and Nancy Boedy, bond portfolio manager.

Goodyear Tire & Rubber

($ millions)	
Total assets	2,123
Defined benefit	2,028
Defined contribution	30
401(k)	65
Employer contributions	85
Benefit payments	135

AKRON, Ohio — The Goodyear Tire & Rubber Co. pension fund added Northern Trust company as its master trustee during the year. The fund also replaced some of its balanced managers with equity managers, but a spokesman would not comment on specific changes.

During the year, Oren G. Shaffer, vice president and treasurer, replaced Donald Kronenburger.

Total employee benefit assets for the year ended Sept. 30 increased 14.5% to $2.123 billion from $1.854 billion.

Total employer contributions to the pension fund in 1985 rose 18%, to $85 million from $72 million in 1984. About $135 million was paid out to retirees, up 11.5% from $121 million in 1984.

The fund has $175 million in stock index funds. Roughly $46 million is held in foreign equities through commitments to foreign commingled funds of Prudential Insurance and J.P. Morgan.

Real estate equity holdings totaled $168.4 million and there was $68.4 million invested in mortgages during the past year.

The approximate asset mix as of Sept. 30 was: 56.7% equities, 22.3% bonds, 4.1% cash equivalents, 8.3% real estate equity, 5.2% annuities and 3.4% mortgages.

Equity managers: Bankers Trust; Citicorp; Equitable Life; Favia, Hill; J.P. Morgan; National City Bank of Cleveland; Prudential Insurance; State Street Bank; Concord Capital; Trust Co. of the West; Dillon, Read; United Capital; Pilgrim, Baxter, Hoyt and Greig; Nicholas.

Bond managers: Equitable Life, J.P. Morgan Investment, National Bank of Detroit, Prudential Insurance, and Desai Capital Management.

Real estate: Equitable Life, J.P. Morgan Investment and Prudential Insurance.

GICs: Metropolitan Life and Prudential Insurance.

Annuities: Equitable Life, Metropolitan Life, Prudential Insurance, and The Travelers.

Key personnel are James R. Glass, group executive vice president; Mr. Shaffer, vice president and treasurer; and Richard E. Galloway, assistant treasurer.

GTE Corp.

($ millions)	
Total assets	6,740
Defined benefit	6,000
Thrift or savings	740
Employer contributions	300
Benefit payments	183

STAMFORD, Conn. — GTE Corp. enjoyed a $1.84 billion increase in its pension fund assets in the 12 months ended Sept. 30, a 37.6% jump.

The remarkable growth experienced by the fund in 1985 follows a poor 1984 during which the fund grew by only 2%.

It was another year of employee turnover, with David Seidel replacing Richard Klemm as vice president-pension fund management. Mr. Klemm took the position in 1984.

The fund dropped 17 managers from its previous stable of 55 managers and hired six.

Those dropped were: Bartow McLeod International; Boston Co.; Century Capital; Dean Witter Reynolds Intercapital; Hambrecht and Quist; Hathaway Associates; Hoisington; Manufacturers Hanover; Marine Trust; Morgan Stanley; Neville, Rodie & Shaw; T. Rowe Price; Putnam Advisory; Roley, Nichols; Sovran Bank; Warburg-Pincus; and Wentworth Hauser Violich.

Those hired were: Geewax, Terker; Investment Reserves; Winchester Capital; Manufacturers National; Chase Investors; and Oppenheimer & Co.

GTE's fund now has 44 investment management firms.

The fund runs $1.111 billion in-house; $1.04 billion in fixed income and $71 million in equity.

The asset mix of the pension fund as of Sept. 30 was stocks, 67%; bonds, 22.6%; cash equivalents, 9%; real estate equity, 1%; and 0.4% mortgage-backed securities.

The fund employs both stock options and stock index futures. It had $430 in indexed stocks; $240 million in indexed bonds; $602 million invested in foreign equities and $65 million in foreign fixed income; $73 million in venture capital; $45 million in oil and gas; and $60 million in real estate equity.

Equity managers: Bankers Trust; Baring International; BMI Capital; Cashman, Farrell; Citibank; Concord Capital; Eagle Management; Fidelity International; First Manhattan; First Pacific; Franklin Portfolio; Frontier Capital; Geewax, Terker; General American Advisers; GeoCapital Corp.; Grantham, Mayo, Van Otterloo; G.T. Capital; Hellman, Jordan; Hotchkis & Wiley; Hutton Capital; Investment Reserves; Johnson, Valliant; Morgan Grenfell; Morgan Guaranty; Oppenheimer & Co.; Pacific Financial Research; Pioneering Management; PRIMECAP; Provident Investment Counsel; Rowe Price-Fleming; Schafer Capital; Trust Co. of the West; Trustee & Investors; Wertheim-Philippe International; Winchester Capital.

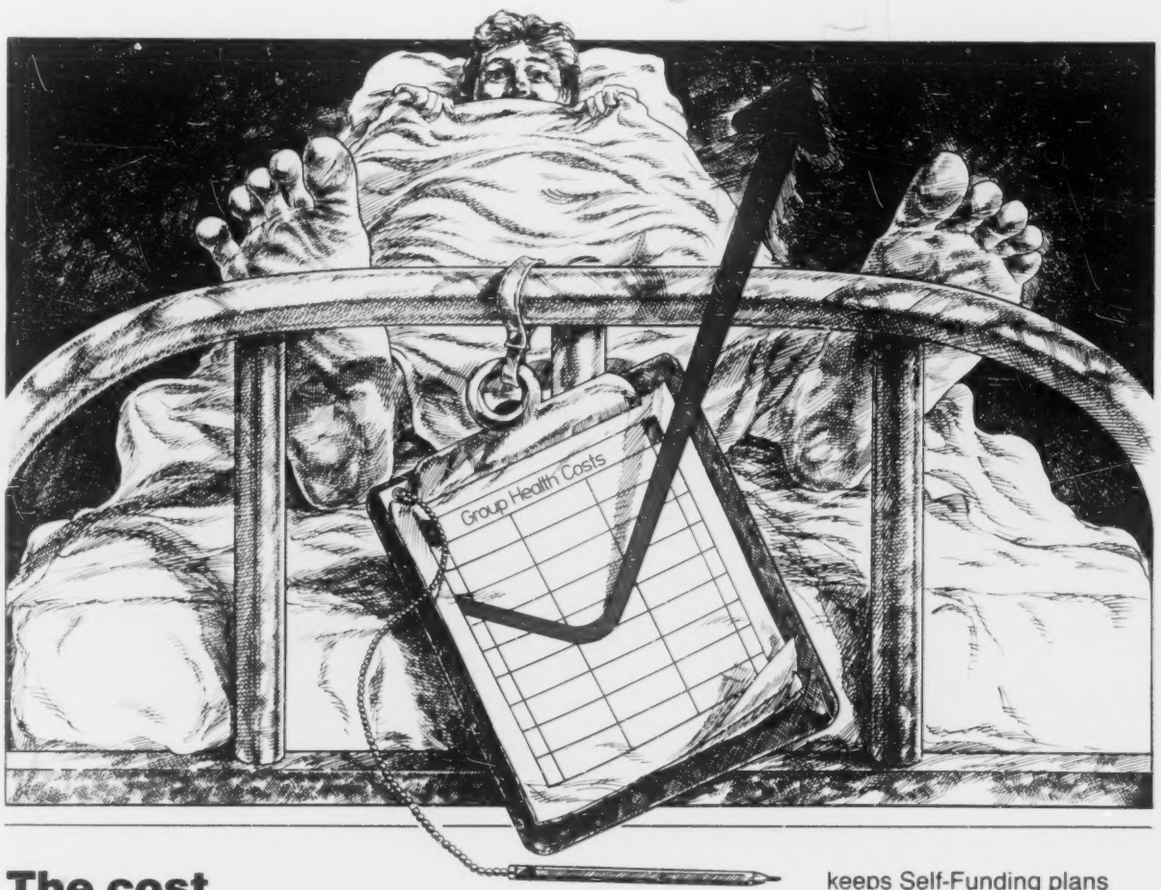
Fixed-income managers: Beutel, Goodman International; Endowment Management; Morgan Grenfell; Pacific Investment Solomon Asset.

Real estate managers: Citibank; Manufacturers National Bank; Morgan Guaranty; State Street Bank.

Other managers: Chase Investors; Fayez Sarofim.

Bankers Trust is the master trustee.

Key personnel are John B. Car-



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roll, president of GTE Investment Management Corp. and David A. Seidel, vice president-pension fund management at GTE Investment.

h

Employees' Retirement System of Hawaii

($ millions)	
Total assets	2,374*
Defined benefit	2,374
Employer contributions	165
Benefit payments	132

*as of June 30, 1985

HONOLULU — The Employees' Retirement System of Hawaii pension assets totaled $2.374 billion as of June 30, a 7.9% increase from the $2.2 billion reported a year earlier.

In addition to increasing assets, the fund changed it allocation, increasing its equity assets by seven percentage points, and hired some new equity managers in 1985.

They were: Alliance Capital; Atalanta/Sosnoff; INVESCO; and Barrow, Hanley, Mewhinney & Strauss.

The fund dropped Eagle Management and Scudder, Stevens & Clark as equity managers.

Benefit payments for the fund are expected to increase 48.3% for 1985 to $132 million from $89 million in 1984. At the same time, employer contributions dropped slightly, to $165 million from $169 million.

The fund manages $778 million in pension assets internally, $400 million in residential mortgages and $378 million in commercial mortgages.

The fund has $130 million in indexed stocks; $142 million committed to GICs; $125 million invested in foreign equity; $19 million in real estate equity; and $394 million in mortgages.

The fund's pension asset mix as of June 30 was 27% stocks, 35% bonds, 7% cash equivalents, 6% GICs, 17% mortgages and 8% international and indexed assets.

Equity managers: Alliance; Atalanta/Sosnoff; INVESCO; Barrow, Hanley, Mewhinney & Strauss; Delaware Investment Advisors; Loomis, Sayles; Bernstein-Macaulay.

Bond managers: Lehman Management; Pacific Investment; Scudder, Stevens; Wentworth, Hauser and Violich; Fayez Sarofim.

Real estate managers: Aetna; Metropolitan; Connecticut General.

International managers: Nomura Capital; Daiwa International.

Index manager: Mellon Capital.

Irving Trust is the master custodian.

Key personnel overseeing investments are: Stanley Siu, executive secretary, and David Shimabukuro, assistant secretary.

Hughes Aircraft Co.

($ millions)	
Total assets	3,000
Defined benefit	2,000
401(k)	1,000
Employer contributions	na
Benefit payments	na

CULVER CITY, Calif. — Hughes Aircraft Co.'s employee benefit assets totaled $3 billion as of Sept. 30, an increase of 10.2% from the $2,722 million reported the previous year. Defined benefit assets fell 1.2%, to $2 billion from $2.024 billion.

The asset mix for the pension fund was 59% stocks, 4% bonds, 18% cash equivalents, 7% real estate equity, 6% GICs, 4% venture capital, 1% international and 1% oil and gas, according to recent data from the Money Market Directory.

Managers: Alliance Capital; Capital Guardian; Coldwell Banker; Dillon, Read; Eberstadt; Forstmann-Leff; Frontier; G.T. Capital; Hagler, Mastrovita; Jennison Associates; MacKay-Shields; McKenzie, Walker Investment; Neuberger & Berman; T. Rowe Price; Reich & Tang; Rollert & Sullivan; Rosenberg Capital Management; RREEF; Scudder Stevens & Clark; TCW Asset Management; Bank of America; Rowe Price Fleming International; PRIMECAP Management; Kurtz Capital Management; Bankers Trust Investment; Andron, Cechettini & Associates, according to Money Market Directory.

Bankers Trust is the master trustee.

Key personnel involved in overseeing the investment management of assets are T.V. Kweene, senior vice president-finance; and W. Allen Reed, president-Hughes Investment Management Co.

The use of leasing as corporate financing tool will be examined April 14.

i

IBM Corp.

($ millions)	
Total assets	13,939
Defined benefit	13,139
401(k)	800
Employer contributions	630
Benefit payments	206

STAMFORD, Conn. — IBM Corp. added Alliance Capital and existing bond manager Jennison Associates to its equity manager roster in 1985. It dropped Capital Guardian; Hathaway & Associates; and Lord, Abbett.

The company's total employee benefit assets grew 27.6% for the year ended Sept. 30 to $13.939 billion from $10.918 billion.

IBM increased its internally run portfolio by almost 50% during the year ended Sept. 30, to $5.9 billion from $4 billion.

The fund invests in international, real estate, venture capital, stock and bond options and stock index and fixed-income futures. Company officials would not reveal specific figures or the asset mix.

Equity managers: Alliance; Jennison; Bankers Trust; Citibank; Concord Capital; Cole, Yeager & Wood; Delaware Investment Advisors; Dimensional Fund Advisors; G.T. Capital; Fidelity International; Franklin Portfolio; John Hancock Venture Capital; Lombard-Odier International; Morgan Guaranty; PM Portfolio Management; Rowe Price-Fleming International; Solomon Asset Management; State Street Research & Management; TCW Asset Management; T. Rowe Price; Wellington Management.

Bond managers: Jennison Associates; Fischer, Francis, Trees & Watts.

Real estate managers: Prudential; RREEF; Equitable.

Chase Manhattan Bank is master trustee.

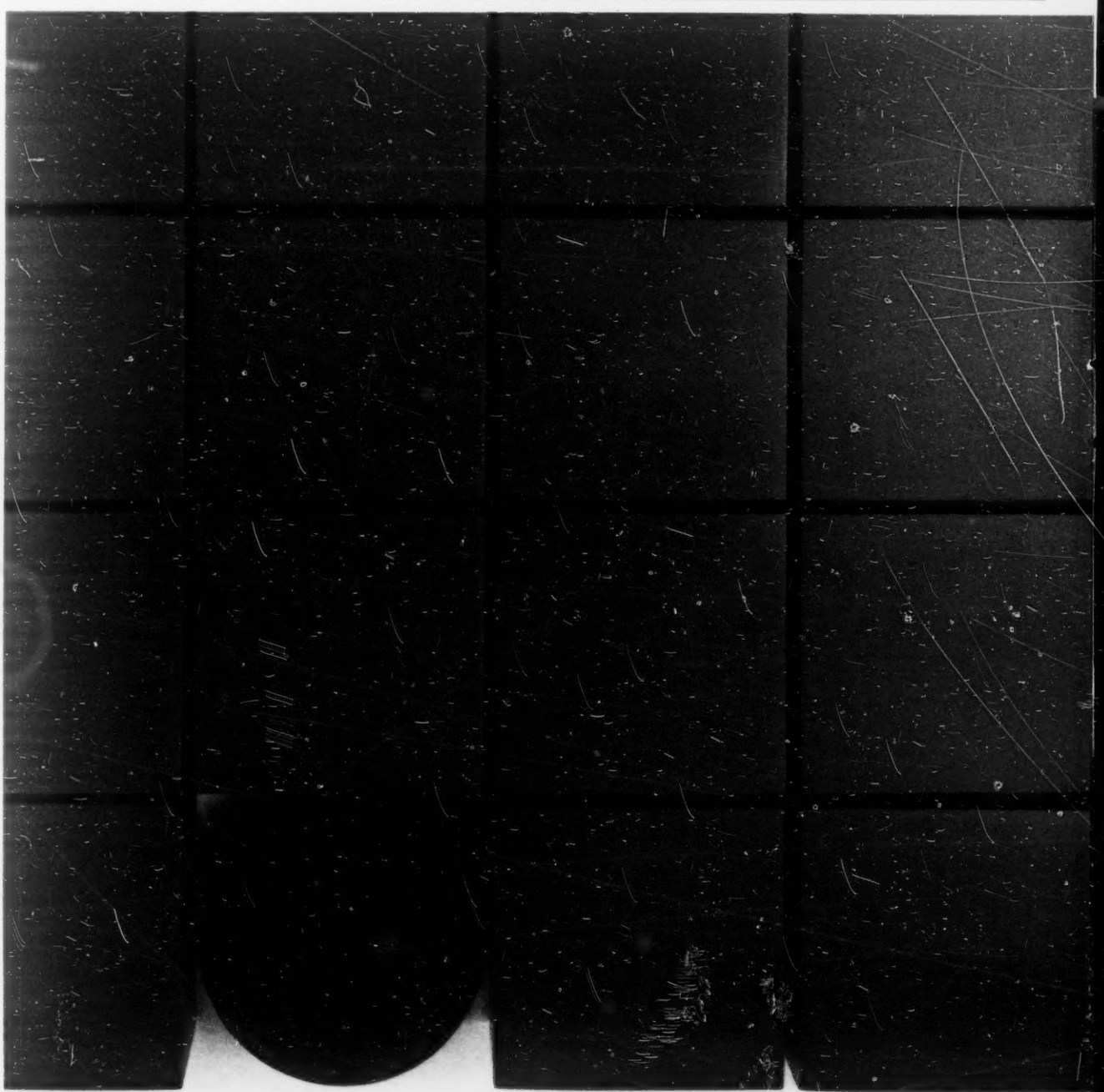
Officials overseeing the fund are B.E. Langton, assistant treasurer; W.V. Hoyt, director-investment strategy; and R.E. Shultz, director of U.S. retirement funds.

Illinois Municipal Retirement Fund

($ millions)	
Total assets	2,318
Defined benefit	2,318
Employer contributions	118
Benefit payments	106

CHICAGO — During 1985, the Illinois Municipal Retirement Fund made its first moves into equity real estate and venture capital.

With a total commitment of $66 million, the pension plan selected open-end commingled real estate funds managed by Security Capital Real Estate, Prudential Asset Management and First Chicago Investment Advisors, and closed-end funds with LaSalle Advisors and



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In venture capital, its $2.3 million commitment was split between the Centennial Fund and Oxford Venture Fund.

During 1985, Jack Claes became president of the fund when Marvin Lapicola's term ended. Mr. Lapicola still serves on the board.

The fund had $2.318 billion in assets as of Sept. 30, an increase of almost 20% from the $1.932 billion reported a year earlier. Its employer contributions were $118 for 1985, with benefit payouts of $106 million.

The asset mix as of Sept. 30 was 38.6% stocks, 51.4% bonds (including some mortgage-backed securities), 7.1% cash equivalents, 2.8% real estate equity and 0.1% venture capital.

The fund manages $45 million internally, all in short-term investments. It also has $99.5 million in indexed stocks.

Equity managers: American National Bank; Batterymarch; Dillon Read; Dimensional Fund Advisors; Fidelity Management; MacKay-Shields.

Bond managers: Criterion; MHIC.

Real estate managers: First Chicago; LaSalle; Prudential; Security Capital; TCW.

Venture capital managers: Centennial Fund; Oxford Venture Fund.

Continental Illinois is the fund's custodian.

Key investment personnel are Mr. Claes; Robert L. Cusma, executive director; and Hiroshige Mori, investment manager.

Illinois Teachers' Retirement System

	($ millions)
Total assets	4,474
Defined benefit	4,474
Employer contributions	225
Benefit payments	315

SPRINGFIELD, Ill. — Assets of the Teachers' Retirement System of the State of Illinois totaled $4.474 billion as of Sept. 30, an 18.1% increase from $3.788 billion a year earlier.

The fund received $225 million in contributions in 1985, a 5% increase from 1984's contribution of $214 million, and paid out $315 million in benefits, the same as the previous year.

During the year, the Illinois teachers hired equity manager Ariel Capital, giving it $1 million; and placed $100 million in a stock index fund managed by American National Bank.

The fund has $22 million in international equities, $10 million in venture capital and $100 million in real estate equity.

The asset mix as of Sept. 30 was 40% stocks, 33% bonds, 10% cash equivalents, 2% real estate equities and 15% mortgage-backed securities.

Harris Trust & Savings Bank is the fund's master trustee.

The fund uses bond options and stock and fixed-income futures.

Key personnel involved in investment management are Samuel W. Anderson, executive director, and Charles F. Hofer, investment officer.

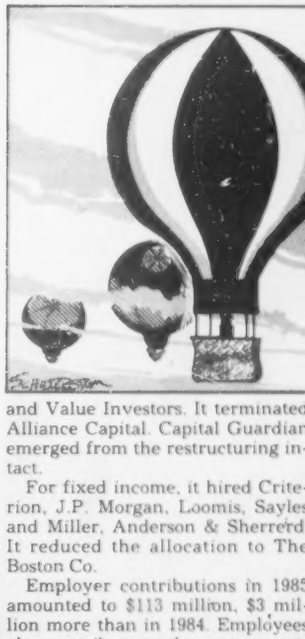
Iowa Public Employees' Retirement System

	($ millions)
Total assets	2,636
Defined benefit	2,636
Employer contributions	113
Benefit payments	108

DES MOINES, Iowa — Assets of the Iowa Public Employees' Retirement System rose 21.3% to $2.636 billion in 1985.

The system restructured its investment manager lineup during the year to take a more aggressive stance in the equity and bond markets.

For equities, it hired Batterymarch, Wellington, Provident, Rosenberg Capital, Prudential Asset Management, IDS Advisory Group and Value Investors. It terminated Alliance Capital. Capital Guardian emerged from the restructuring intact.



For fixed income, it hired Criterion, J.P. Morgan, Loomis, Sayles and Miller, Anderson & Sherrerd. It reduced the allocation to The Boston Co.

Employer contributions in 1985 amounted to $113 million, $3 million more than in 1984. Employees also contribute to the system, putting in about $75 million. Benefit payments amounted to $108 million, an increase of $8 million.

As of Sept. 30, the approximate asset mix was 26% stocks, 50% bonds, 13% mortgage-backed securities and 11% cash equivalents. Later in the year, trustees agreed to make the fund's first commitments to venture capital, real estate and leveraged buy-outs.

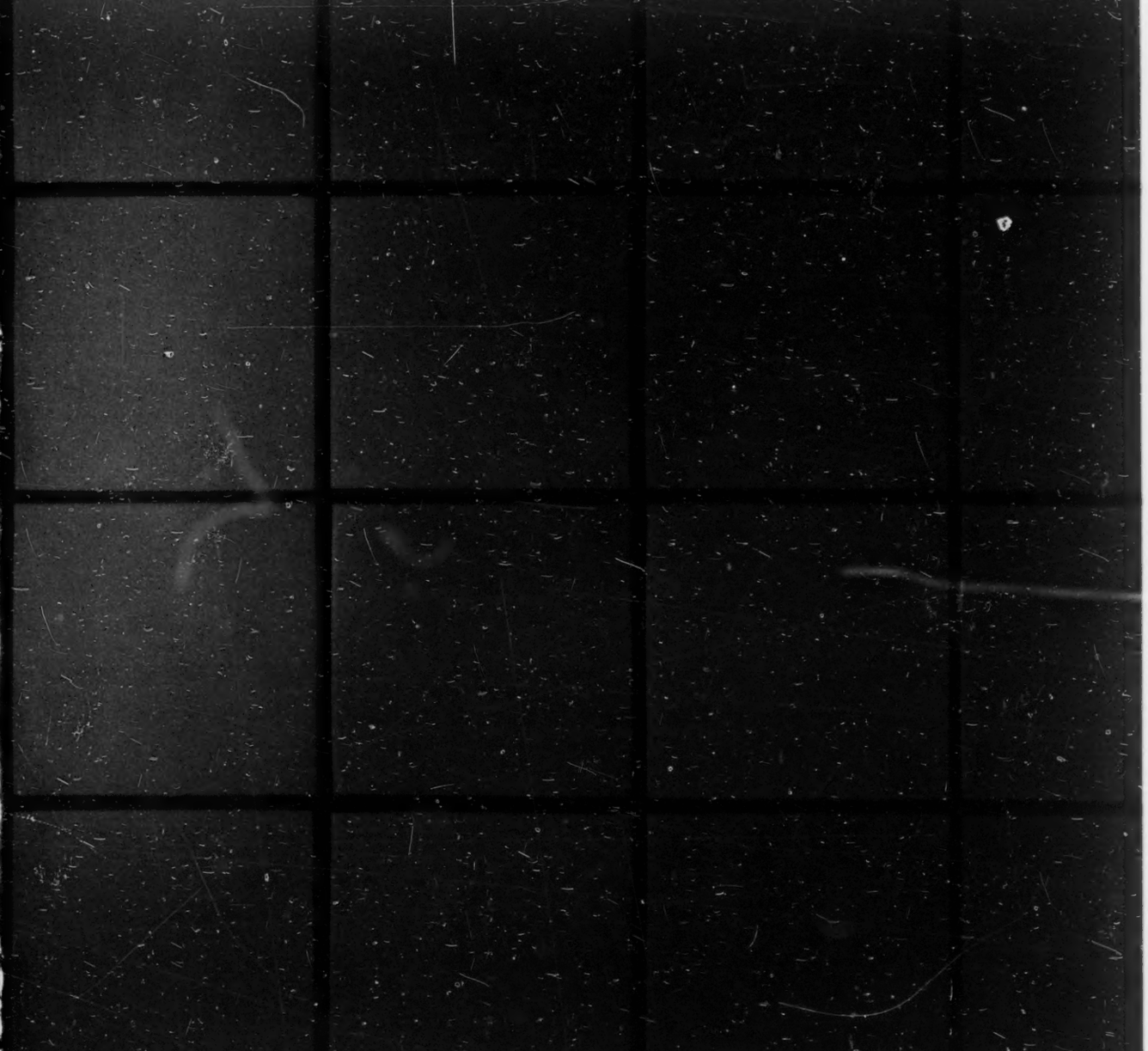
Short-term cash investments of $286 million are managed in-house.

Equity managers: Batterymarch; Wellington; Provident Capital; Rosenberg Capital; Prudential IDS Advisory; Value Investors; Capital Guardian.

Bond managers: Criterion; J.P. Morgan; Loomis, Sayles; Miller Anderson & Sherrerd; The Boston Co.

Morgan Guaranty is custodian.

Key investment personnel are Maurice Baringer, administrator; Dennis Jacobs, deputy administrator; and Larry Thompson, investment officer.



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Kansas Public Employees' Retirement System

	($ millions)
Total assets	2,216
Defined benefit	2,216
Employer contributions	93
Benefit payments	109

TOPEKA, Kan. — The Kansas Public Employees' Retirement System's assets rose 18.5% to $2.216 billion as of Sept. 30 from $1.87 billion the year before.

Employer contributions declined 9% in 1985 to $93 million from $102 million the previous year.

Benefits payments rose 41.5% to $109 million in 1985 from $77 million the year earlier.

The fund committed about 10% or $200 million, of its assets to real estate, hiring J.W. O'Connor to place the new investments. As of the end of 1985, O'Connor hadn't made any investments.

The fund also added an equity manager, Market Research & Management, assigning it $20 million.

The fund's asset mix as of Sept. 30 was 35.2% stocks, 28.4% bonds, 33.4% cash equivalents, 0.5% real estate equity, 2.5% mortgages.

Among its assets, it has $69.7 million in real estate the fund runs in-house, consisting of $11.7 million in equity and $58 million in mortgages. It also runs another $263 million in-house in bonds and short-term investments.

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The fund uses stock and bond options and stock-index and fixed-income futures.

Equity managers: Capital Supervisors; Investment & Capital Management; Provident Investment Counsel; Pilgrim Baxter Hoyt & Greig; Reimer & Koger; Market Research & Management.

Bond managers: Robert C. Brown; Pacific Investment Management; Investment & Management Group; Reimer & Koger.

Real estate manager: J.W. O'Connor.

Its master custodian is Commerce Bank & Trust, Topeka.

Overseeing the fund are: Michael Russell, chairman, board of trustees; Marshall Crowther, executive secretary; and Ron Bleidissel, chief accountant.

The use of mutual funds in pension plans is the focus of a special report May 12.

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*As reported by CDA Investment Technologies, Inc. for the period ending 09/30/85.

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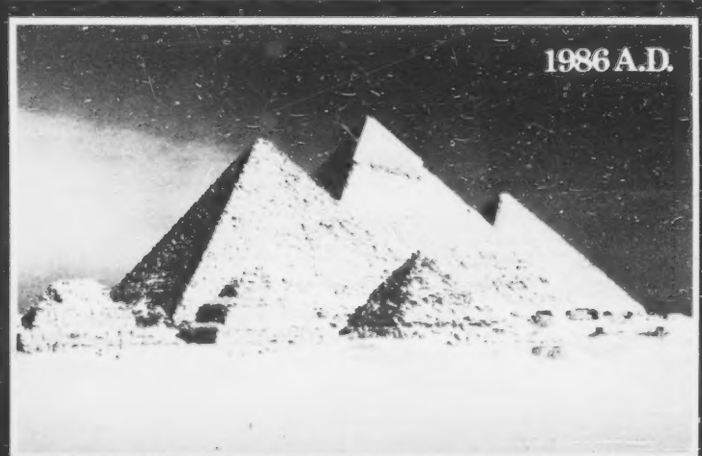


NCNB REAL ESTATE FUND

1

Lockheed Corp.

($ millions)

Total assets	4,373*
Defined benefit	3,137
401(k)	1,236
Employer contributions	na
Benefit payments	na

*as of Dec. 31, 1984

BURBANK, Calif. — Lockheed Corp.'s employee benefit assets totaled $4.373 billion as of Dec. 31, 1984, an increase of 6.6% from the $4.102 billion reported as of Sept. 30, 1984.

Pension assets alone rose 6%, to $3.137 billion from $2.959 billion for the same three-month period. Lockheed also reported $1.236 billion in a 401(k) plan.

Defined benefit plan managers: Alliance; Anhalt/O'Connell; Bankers Trust; Batterymarch; Bernstein-Macaulay; Capital Guardian; Century Capital; Chase Investors; Citicorp Investment Management; Delaware Investment Advisers; First Interstate Bank of Washington; Forstmann-Leff; Thomas L. Karsten Associates; Lombard Odier International; Mellon Bank; J.P. Morgan Investment; Royal Trust; Security Pacific; Smith Barney, Harris Upham; TCW Asset Management; Western Asset Management.

Defined contribution managers: Bankers Trust; Delaware; Forstmann-Leff; Manufacturers Hanover; Sarofim Trust; TCW; Wertheim.

Bankers Trust is the master trustee.

The key person in charge of overseeing investments is George C. Weintz, investment counsel.

Los Angeles County Employees' Retirement Association

($ millions)

Total assets	5,747*
Defined benefit	5,576
401(k)	11
Other	160
Employer contributions	330
Benefit payments	312

*as of June 30, 1985

LOS ANGELES — The Los Angeles County Employees' Retirement Association employee benefit assets totaled almost $5.747 billion as of June 30, an increase of almost 30.8% from the $4.394 billion reported Sept. 30, 1984.

Of the total, $5.576 billion was in the defined benefit plan, $11.4 million was in the new 401(k) plan and $159.2 million was in a 457 savings plan. The latter two are administered directly by Los Angeles County, not the association.

In November, the county hired five real estate managers, committing at least $100 million. The new managers are John McMahan Associates; Prudential Asset Management; Heitman; Goldman, Sachs; and Security Capital Real Estate.

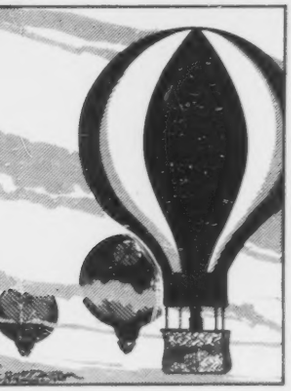
Of the $5.576 billion administered by the retirement association, $983 million is run in-house: $521 million in fixed income; $194 million in short-term investments; and $268 million in other investments.

The association has $10 million in real estate equity and $268 million in mortgages.

For fiscal year 1985-'86, the plan received $330 million in contributions and paid out $312 million in benefits.

As of June 30, the asset mix for the defined benefit plan was 25.05% stocks, 34.75% bonds, 14.42% cash equivalents, 5.55% mortgages, 20.02% mortgage-backed securities and 0.21% in equity real estate.

Equity managers: Massachusetts Financial Services; Capital



uardian Trust; Security Pacific vestment; Stein Roe & Farnham; oomis, Sayles.

Bond managers: Capital Guardn; Brown Brothers Harriman; MB Investment; Massachusetts nancial; Criterion; Morgan Guarty.

Real estate managers: The arsten Co.; Quong-Watkins Propties.

The custodian for the retirement stem is Security Pacific National ank.

Key personnel overseeing inestments are Richard B. Dixon, unty treasurer; Sandra R. Tray, senior assistant treasurer-finance; and Charles L. Spencer, rement systems administrator.

eachers Retirement System of Louisiana

($ millions)	
tal assets	2,110
Defined contribution	2,110
Employer contributions	120
enefit payments	224

BATON ROUGE, La. — In Jan- ry 1985, the Teachers Retirement stem of Louisiana started a se- rities lending program, bringing an estimated $650,000 to the nd, according to Jennifer Netter- lle, investment portfolio special- for the fund.

Total assets of the system in- eased 20.3% to $2.110 billion as of pt. 30, up from $1.754 billion the evious year.

The fund manages $350 million ternally in short-term invest- enis. The system also invests $250 illion in mortgage-backed securi- s.

The asset mix as of Sept. 30 was % stocks, 57% bonds, 17% cash uivalents and 12% mortgage- cked securities.

Equity manager: M.D. Sass.

Balanced managers: Scudder, evens & Clark; Citicorp; Hiber- a National; Massachusetts Finan- al.

The fund's custodian is City Na- nal Bank of Baton Rouge.

The key personnel overseeing e investment of the system's sets are Ms. Netterville and Car- ton Page, secretary and treasurer.

he LTV Corp.

($ millions)	
tal assets	2,173
Defined benefit	1,883
Profit-sharing	197
Thrift or savings	93
Employer contributions	na
enefit payments	na

DALLAS — In an effort to re- uce costs and conserve cash, The TV Corp. sought and received a 83 million pension contribution aiver from the Internal Revenue ervice and elected to freeze two efined benefit plans in its steel nit.

The company replaced the fro- en plans with a single defined ontribution plan.

Total employee benefit assets de- ined by about 7.6% for the year nded Sept. 30, falling to about $2.2 illion from about $2.3 billion. The ompany declined to discuss the easons for the drop.

Five equity managers and one ond manager are no longer on the company's list of external asset managers. Dropped were equity managers Century Capital, Continental Illinois, Endowment Management, Forstmann-Leff and Fayez Sarofim and bond manager Manufacturers Hanover.

The fund manages $631 million of its pension assets internally. The company declined to say how the assets are invested.

The asset mix as of Sept. 30 was 60% stocks; 25% bonds; 6% cash equivalents; 7% real estate equity and 2% other.

Equity managers: Bankers Trust; Batterymarch; Delaware Investment Advisors; Fidelity International; Franklin Portfolio; InterFirst; Lord Abbett; MacKay-Shields; Mellon Bank; MSecurities; Morgan Grenfell; National City Bank.

Bond manager: Scudder, Stevens & Clark.

Real estate: CB Institutional IV; Karsten; Security Capital.

GICs: Aetna; John Hancock; Metropolitan; Travelers.

Mellon Bank is master trustee.

Dennis J. Hamilton is director-benefit trust funds.

Computer products for use by corporate finance and pension fund managers is the topic of a special section in the March 3 issue of *P&I Age*.

m

Maryland State Retirement and Pension Systems

($ millions)	
Total assets	5,020
Defined benefit	5,020
Employer contributions	449*
Benefit payments	339*

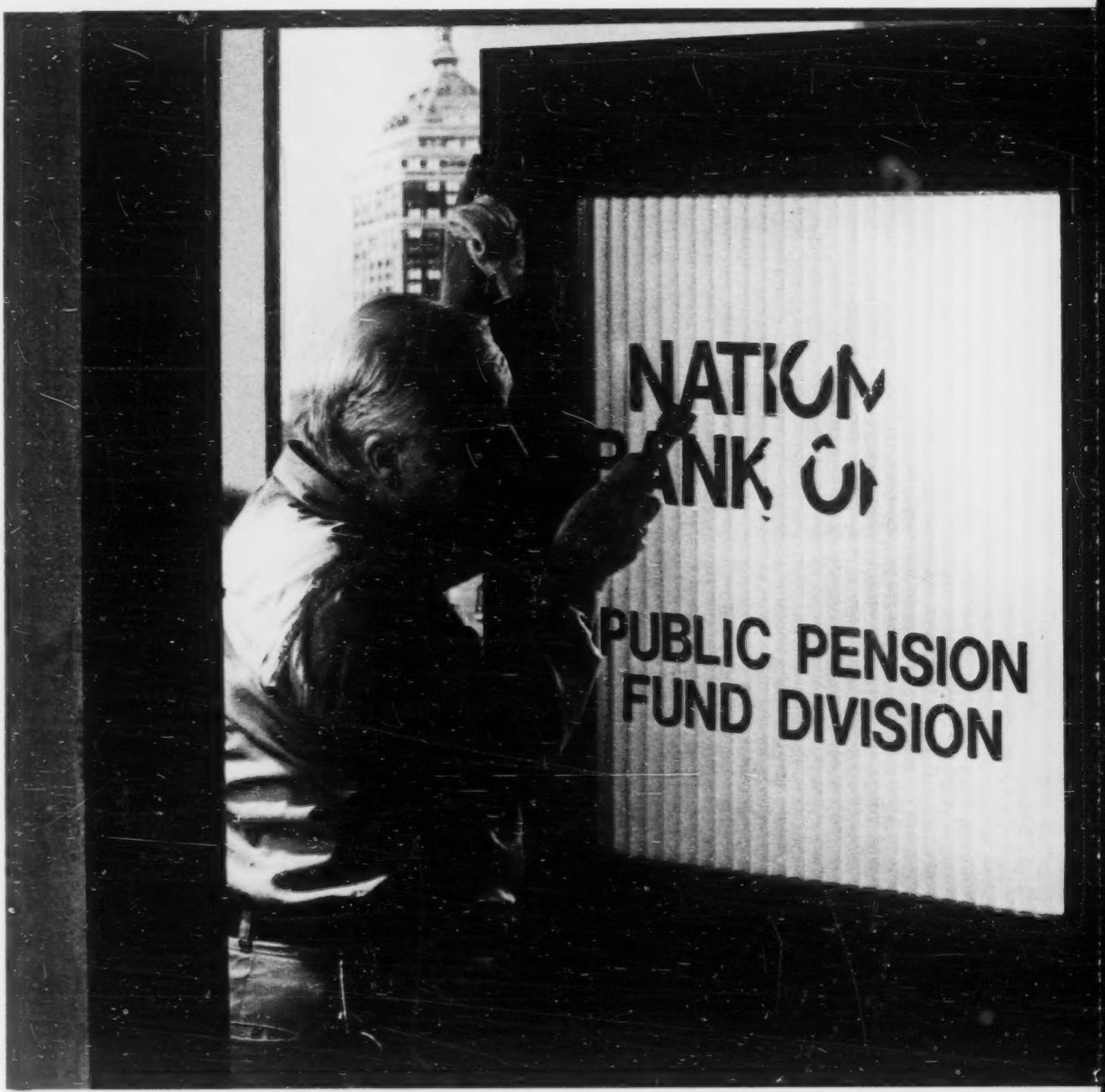
*as of June 30, 1984

BALTIMORE — In 1985, the Maryland Legislature passed a law effective July 1 placing a two-year moratorium on new investments in securities of companies that have not signed the Sullivan principles dealing with apartheid in South Africa.

However, the law did not contain any divestiture provisions.

During 1985, the Maryland State Retirement and Pension Systems released three equity managers: Hambrecht & Quist; Tower Capital; and Loomis, Sayles. The fund did not hire any managers.

As of Sept. 30, total assets of the systems had grown 22.2% to $5.02 billion from $4.107 billion the previous year. Officials of the fund attributed the increase to good market returns.



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As of June 30, 1984, the most recent figures available, the employer contribution was $449 million. Benefits paid as of the same date were $339 million.

Equity managers: Alliance Capital; Atlanta Capital; Capital Guardian; Dimensional Fund Advisors; Eaton & Howard, Vance Sanders; Hagler; Mastrovita & Hewitt; Investment Advisers; Investment Counselors of Maryland; Johnson Valliance & Broadfoot; MacKay-Shields; Scudder, Stevens & Clark; State Street Research; Wellington Trust.

Bond managers: Investment Counselors of Maryland; Mercantile Safe Deposit & Trust; Miller, Anderson & Sherrerd; Morgan Stanley; Pacific Investment Management; Standish, Ayer & Wood.

Of the $2.518 billion managed internally, $1.831 billion is run in an indexed stock fund and $687 million is invested in fixed income. The systems also invest $31 million in mortgages.

The systems' asset mix as of Sept. 30 was 56% stocks, 29% bonds, 4% cash equivalents, 10% mortgage-backed securities and 1% mortgages.

The custodian is First National Bank of Maryland.

The key personnel are Howard J. France, executive director-investments; Enos T. Throop Jr., director-equity; and Arthur M. Lynch Jr., director-fixed income.

Massachusetts State Employees & State Teachers Annuity Funds

	($ millions)
Total assets	2,917
Defined benefit	2,917
Employer contributions	300
Benefit payments	na

BOSTON — In 1985, the fund continued a restructuring begun in 1984 aimed at reducing the state's unfunded liabilities. Eventually, fund officials would like to see the equity portion of the fund's portfolio near the 40% mark.

As of Sept. 30, equities were at 12.1%, and a month later were over 13%, said Alan R. West, chief investment officer for the fund.

Mr. West said the fund would eventually look at real estate, with a target of 5% to 10% of assets in real estate.

In 1985, the fund hired Hagler, Mastrovita & Hewitt; One Federal Asset Management; Trinity Investment; and Ruggles and Crysdale to run equity accounts. Independence Investment Associates was hired for a core equity account.

In the first quarter of 1985, the fund hired State Street Bank & Trust to serve as master custodian, replacing Bank of Boston.

The total employee benefit assets increased 21.5% as of Sept. 30, to $2.917 billion from $2.4 billion a year earlier.

Of that, $2.564 billion is managed internally; $2.395 billion in fixed income and $169 million in short-term investments.

The asset mix as of Sept. 30 was 12.1% equity; 60.1% bonds; 5.8% cash; and 22% mortgage-backed securities.

The fund has $81 million invested in foreign fixed income, $20 million in an equity index fund and $20 million in GICs. The fund uses stock options.

State Street Bank & Trust is the master custodian.

Mr. West oversees investment management of the fund.

McDonnell Douglas Corp.

	($ millions)
Total assets	4,914*
Defined benefit	3,674
401(k)	1,240
Employer contributions	309
Benefit payments	na

*as of June 30, 1985

ST. LOUIS — According to the 1986 Money Market Directory, McDonnell Douglas has $4.914 billion in employee benefit assets as of June 30, up 19.6% from $4.108 billion as of Sept. 30, 1984.

Employer contributions to all benefit plans for 1985 increased 96.8% to $309 million from $157 million in 1984. The company paid $114 million in benefits to retirees in 1984, the most recent figures available.

Managers: Aetna Capital Management; Aetna Life & Casualty; Bankers Trust-Investment Management Group; Centerre Trust; Concord Capital; Dimensional Fund Advisors; LaSalle Advisors; Nomura Capital; RREEF; TCW Realty.

The company's asset allocation was unavailable.

The master trustee for the pension fund is Bankers Trust.

Key personnel overseeing the investment of the fund's assets are David Hammerstein, director-retirement funds management; Sheryl Kwiatek, senior investment analyst; and Kenneth R. Velten, plan administrator.

Metropolitan Life Insurance Co.

	($ millions)
Total assets	2,525
Defined benefit	1,980
Thrift or savings	520
401(k)	25
Employer contributions	68
Benefit payments	120

NEW YORK — Metropolitan Life's employee benefit assets grew 8.6% during the year ended Sept. 30, to $2.525 from $2.325 billion a year earlier.

In addition to defined benefit plan assets of $1.98 billion, the company reported thrift and saving plan assets of $520 million and a 401(k) plan of $25 million.

The company made $68 million in contributions during the 1985 plan year, and paid out benefits of $120 million.

The plan assets are managed internally, including about $376 million in equities, about $1.39 billion in fixed income, about $20 million in short-term investments and $198 million in other asset classes, including real estate.

The asset mix as of Sept. 30 was 19% stocks, 70% fixed income, 10% real estate and 1% cash.

Michigan State Employees' Retirement Systems

	($ millions)
Total assets	10,516
Defined benefit	10,516
Employer contributions	791
Benefit payments	558

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Michigan State Employees' Retirement Systems increased 17.5% to $10.516 billion as of Sept. 30 from $8.951 billion a year earlier.

Michigan's in-house venture capital operation made commitments of $149 million to several more venture partnerships during 1985, including MBW Venture Partners, Sun Western Investment Fund II, Accel Telecom and New Tech Ventures. It also invested directly in several new companies.

The system also committed $35 million to the Kohlberg Kravis Roberts leveraged buy-out pool. It had put $10 million into an earlier KKR pool, which brought investors gains from the sale of a Los Angeles television station.

The fund has $33 million in real estate equity and $1.34 billion in mortgages as of Sept. 30.

All assets are managed internally. As of Sept. 30, the asset mix was 45.4% equities, 27.9% bonds, 3.9% cash equivalents, 0.3% real estate equity, 12.8% mortgages, 8.8% mortgage-backed securities and 0.9% venture capital.

William A. Amerman is director of investments.

Minnesota State Board of Investment

($ millions)	
Total assets	6,800*
Defined benefit	6,800
Employer contributions	400
Benefit payments	300

*as of June 30, 1985

ST. PAUL, Minn. — The Minnesota State Board of Investment's pension assets totaled $6.8 billion as of June 30, an increase of 21.2% from the $5.607 billion reported Sept. 30, 1984.

A dedicated bond portfolio to fund benefits for retirees was set up late in 1984. Of the $2.7 billion portion of the fund that covers retirees, $2 billion is in the dedicated portfolio, which is managed in-house.

During the year, the fund dropped four equity managers — Trustee & Investor, Siebel Capital, Herbert Smith and Loomis, Sayles. The assets were reallocated to other existing equity managers.

For real estate, the fund added TCW and Aldrich, Eastman & Waltch.

In venture capital, it added Allied Partners, Matrix Partners, Inman & Bowman, Norwest Venture Capital and DSV. It also made a commitment to Kohlberg Kravis Roberts' leveraged buy-out fund.

In addition to the $2 billion dedicated portfolio, the fund also runs $700 million in equities in-house.

The fund has $1.6 billion in indexed stocks, $200 million in real estate equity, $100 million in mortgages, $40 million in venture capital, $25 million in leveraged buy-outs and $30 million in oil and gas. The fund has made commitments to put more money into alternative investments. It uses stock options.

As of June 30, the approximate asset mix was 50% stocks, 35% bonds, 6% cash equivalents, 1% mortgages, 2.5% real estate equity and 1.5% in other investments, including venture capital, leveraged buy-outs and oil and gas.

Equity managers: Fred Alger; Alliance; Beutel Goodman; BMI Capital; Forstmann-Leff; Hellman Jordan; IDS Advisory; Investment Advisers; Lieber & Co.; Norwest Bank; Research Management.

Bond managers: Investment Advisers; Lehman; Morgan Stanley; Miller Anderson & Sherrerd; Northwestern Bank; Western Asset Management.

Real estate managers: Aetna; Aldrich Eastman; Equitable; Heitman; Prudential; RREEF; TCW.

Venture capital managers: Allied Partners; DSV; Inman & Bowman; Matrix Partners; Norwest; Smith Barney; Summit.

Leveraged buy-outs manager: KKR.

State Street Bank is master trustee.

Key investment management personnel are Howard Bicker, executive director; Jeff Bailey, assistant executive director; and Teresa Myers, assistant to the executive director.

Public Employees' Retirement System of Mississippi

($ millions)	
Total assets	2,465*
Defined benefit	2,213
Defined contribution	252
Employer contributions	143
Benefit payments	160

*as of June 30, 1985

JACKSON, Miss. — The move to outside management that began in 1983 was completed during 1985, as the Public Employees' Retirement System of Mississippi disbursed $103.1 million in fixed-income assets among its existing fixed-income managers.

For the first time, the fund allocated assets for an equity index fund and hired Bankers Trust to run it. As of June 30, there was $94.6 million indexed. Those assets came from equity manager Alliance Capital, which was terminated.

Ron D. Logan joined the fund as investment manager, replacing James H. Dunn, who moved over to deputy director of administrative services.

The total pension assets increased 39%, to $2.465 as of June 30 from $1.773 billion nine months earlier.

Equity managers: Bankers Trust; Eaton Vance; INVESCO; Fayez Sarofim; Scudder, Stevens & Clark.

Bond managers: Criterion; Dreyfus Management; Lehman; MacKay-Shields; Manufacturers Hanover; Pacific Investment Management; Wentworth, Hauser and Violich.

The asset mix as of June 30 was 16.9% stocks, 49.8% bonds; 9.8% cash; and 23.5% mortgage-backed securities. The mortgage-backed securities increased by about 10% because two of the fund's fixed-income managers strengthened their emphasis on mortgage-backed securities as part of their overall strategy.

Trustmark National Bank is the master custodian.

Key personnel are Charles D. Wilkinson, deputy director-investments; Ron D. Logan, investment manager; and Anne D. Middleton, investment technician.

The Public School Retirement System of Missouri

($ millions)	
Total assets	2,955*
Defined benefit	2,953
Other	2

Largest profit-sharing plans
($ millions)

Fund	Assets
Sears, Roebuck & Co.	$3,566
Procter & Gamble	2,095
Chevron Corp.	1,425
J.C. Penney Co. Inc.	1,018
Halliburton Co.	817
Northrop Corp.	742
Motorola Inc.	667
American Stores Co.	601
Unocal Corp.	387
Philip Morris	370
Atlantic Richfield Co.	260
Texas Instruments Inc.	260
LTV Corp.	197
John Hancock Mutual Life	134
CIGNA Corp.	90
New YorkLife Insurance Co.	54
American Can Co.	48
ITT Corp.	28
Armco Inc.	17
R.J. Reynolds	15
North American Philips Corp.	15
Raytheon	6
Caterpiliar Tractor Co.	3
Ashland Oil Inc.	2
Total	**$12,802**

Funds investing in mortgages
($ millions)

Fund	Assets
TIAA-CREF	$8,921
California Public Employees	8,731
New York State Common Fund	2,596
Ohio Public Employees	2,000
New York State Teachers	1,595
Michigan State Employees	1,340
General Electric	1,230
Ohio State Teachers	907
California State Teachers	800
Colorado Public Employees	800
Texas Teachers	681
Pennsylvania Public School	571
Alaska State Systems	499
Oregon Public Employees	420
Connecticut Trust Funds	398
Hawaii Employees System	394
Bethlehem Steel Corp.	380
Washington State Board	350
Pennsylvania State Employees	306
L.A. County Employees	268
Arizona State System	250
Louisiana Teachers System	250
Kentucky Retirement Systems	242
Detroit Retirement Systems	230
Alabama Retirement Systems	211
Teamsters Central States	194
Nevada Public Employees	179
Teamsters, Western Conference	138
Westinghouse Electric Corp.	125
N.Y.C. Retirement Systems	119
Chicago Municipal Employees	110
Kentucky Teachers System	106
American Airlines	100
Minnesota State Board	100
San Fransisco Employees	84
Union of Operating Engineers	80
CIGNA Corp.	76
Ohio School Employees	73
Southern Baptist Church	70
Goodyear Tire & Rubber Co.	68
Honeywell Inc.	65
Citicorp	60
Kansas Public Employees	58
Minnesota Mining & Mfg.	50
United Technologies Corp.	50
World Bank	44
Illinois State Board	42
Union Carbide Corp.	40
Owens-Illinois	38
Arkansas Teachers	38
West Virginia Employees	37
Georgia State Systems	36
Phillips Petroleum Co.	35
Maryland State	31
Travelers Insurance Co.	30
Louisiana State Employees	28
Chevron Corp.	24
Ashland Oil	21
Conoco Inc.	18
Aetna Life & Casualty	16
Halliburton Co.	14
Missouri Public School	13
Shell Oil Co.	12
Monsanto Co.	11
Episcopal Church	10
Baltimore Employees	5
Utah State Employees	2
Houston Retirement System	2
Boilermakers and Blacksmiths	NA
Tennessee Consolidated	NA
Total	**$36,822**

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Employer contributions	118
Benefit payments	115

*as of June 30, 1985

JEFFERSON CITY, Mo. — The total assets of the fund increased by $855 million, or about 40.7% in the 12-month period ended June 30, to $2.955 billion.

The plan received contributions of $117.5 million in 1985 and paid benefits of $115 million.

There was $13 million invested in mortgages.

The fund's asset mix as of June 30 was 13.5% stocks; 59.2% bonds; 8.8% cash equivalents; 0.4% mortgages; and 18.1% mortgage-backed securities.

The Boatmen's National Bank is sole manager and master custodian for the retirement system.

DeMarche Associates, Kansas City, was hired in September to study Boatmen's performance. A decision on whether to hire additional managers is pending.

The key person is David W. Mustoe, executive secretary.

Mobil Oil Corp.

($ millions)	
Total assets	4,553*
Defined benefit	3,458
Thrift or savings	1,095
Employer contributions	62
Benefit payments	na

*P&I Age estimate

NEW YORK — *Pensions & Investment Age* estimates Mobil Oil's total employee benefit assets grew 13.8% to $4.553 billion from $4 billion in the 12 months ended Sept. 30.

Mobil cut its pension contribution for the year by more than half, to $62 million from $150 million. The company filed with the Pension Benefit Guaranty Corp. to terminate the approximately $163 million pension fund of Superior Oil Co., which Mobil acquired in 1984, in order to recapture $29 million in excess assets.

According to the 1986 Money Market Directory, Mobil's approximate asset mix as of June 30 was 32% stocks, 27% pooled stocks, 19% bonds, 11% GICs, 10% general insurance accounts, 1% cash and short-term investments. A breakout of the assets of Mobil's defined contribution, 401(k) and employee stock ownership plans was not available.

Equity managers: Alliance Capital; Bankers Trust; Capital Guardian; Fayez Sarofim; Jennison Associates; Miller, Anderson & Sherrerd; State Street Research.

Bond managers: State Street Research.

GIC managers: Aetna Life; Metropolitan Life.

Short-term manager: U.S. Trust Co.

Other managers: Chase Manhattan; Citicorp.

Charles Clune is the manager of benefit funds.

Monsanto Co.

($ millions)	
Total assets	2,900
Defined benefit	2,300
Defined contribution	600
Employer contributions	120
Benefit payments	120

ST. LOUIS — Monsanto's employee benefit assets increased 31.8% to $2.9 billion as of Sept. 30 from $2.2 billion the year earlier. Its pension assets alone rose in that year almost 28% to $2.3 billion from $1.8 billion, while its defined contribution assets rose 50% to $600 million from $400 million. The company attributed the rise in pension assets to performance and in defined contribution assets to both performance and contributions.

Its employee benefit contributions declined almost 8% to $120 million in 1985 from $130 million the previous year. But its benefit payments rose 25% to $120 million in 1985 from $96 million in 1984.

In 1985, Monsanto dropped equity manager Pioneering Management, and hired Hotchkis & Wiley.

Its asset mix as of Sept. 30 was 65% stocks, 20% bonds, 8% cash equivalents and 7% real estate equity. It uses stock and bond options and stock-index and fixed-income futures.

Equity managers: Trinity; Hotchkis & Wiley; Citibank; Lincoln Capital; Fred Alger; State Street Research; Hagler Mastrovita; T. Rowe Price; Delaware Investment; Equitable; Lord Abbett; Jennison.

Bond managers: Morgan Guaranty; Centerre Trust; Fischer Francis Trees & Watts.

Real estate managers: Rosenberg; Equitable; Trust Co. of the West; LaSalle.

Its master trustee is Northern Trust.

Overseeing the fund are Richard McGahan, manager, and A.E. Wolfarth, assistant treasurer.

The annual PIPER report will be featured Feb. 17.

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New Jersey Division of Investment

($ millions)	
Total assets	12,494*
Defined benefit	12,494
Employer contributions	na
Benefit payments	na

*as of June 30, 1985

TRENTON, N.J. — Employee benefits assets at the New Jersey Division of Investment increased 36.3% to $12.494 billion as of June 30, 1985 from $9.166 billion in 1984.

The sizable gain was due largely to strong performance in the fixed-income markets, where $7.8 billion of the public fund's assets are invested.

The division manages all assets internally, with 31% invested in stocks, 51% in bonds, 12% in mortgages and 6% in cash equivalents.

It uses stock options as a hedging vehicle for its equity commitment.

A group of 12 banks acts as custodian.

The pension fund is overseen by Roland Machold, director; William Mooney, deputy director; and Stephen Kornrumpf, assistant director.

New York City Retirement Systems

($ millions)	
Total assets	25,063
Defined benefit	21,849
Defined contribution	2,259
Other	955
Employer contributions	1,868
Benefit payments	2,500

NEW YORK — The New York City Retirement Systems' $25.063 billion in assets comprises $21.849 billion overseen by City Comptroller Harrison J. Goldin and $3.214 billion overseen by the trustees of the New York City Teachers' Retirement System.

The total assets represent an 18.4% increase for the year ended Sept. 30.

Mr. Goldin's office makes all investments for three of the five New York City funds — the Employees Retirement System, with $10.172 billion in assets; the Police Department Pension Fund, $3.6 billion; and the Fire Department Pension Fund, $1.27 billion.

It oversees fixed-income investments for the two other funds — the $421 million Board of Education Retirement System and the $9.6 billion Teachers' Retirement System — investing $368 million and $6.437 billion, respectively, for those funds.

As 1985 ended, fund officials were revamping their management approach by establishing benchmark portfolios for each of their investment managers. One possible outcome would be a shift to passive

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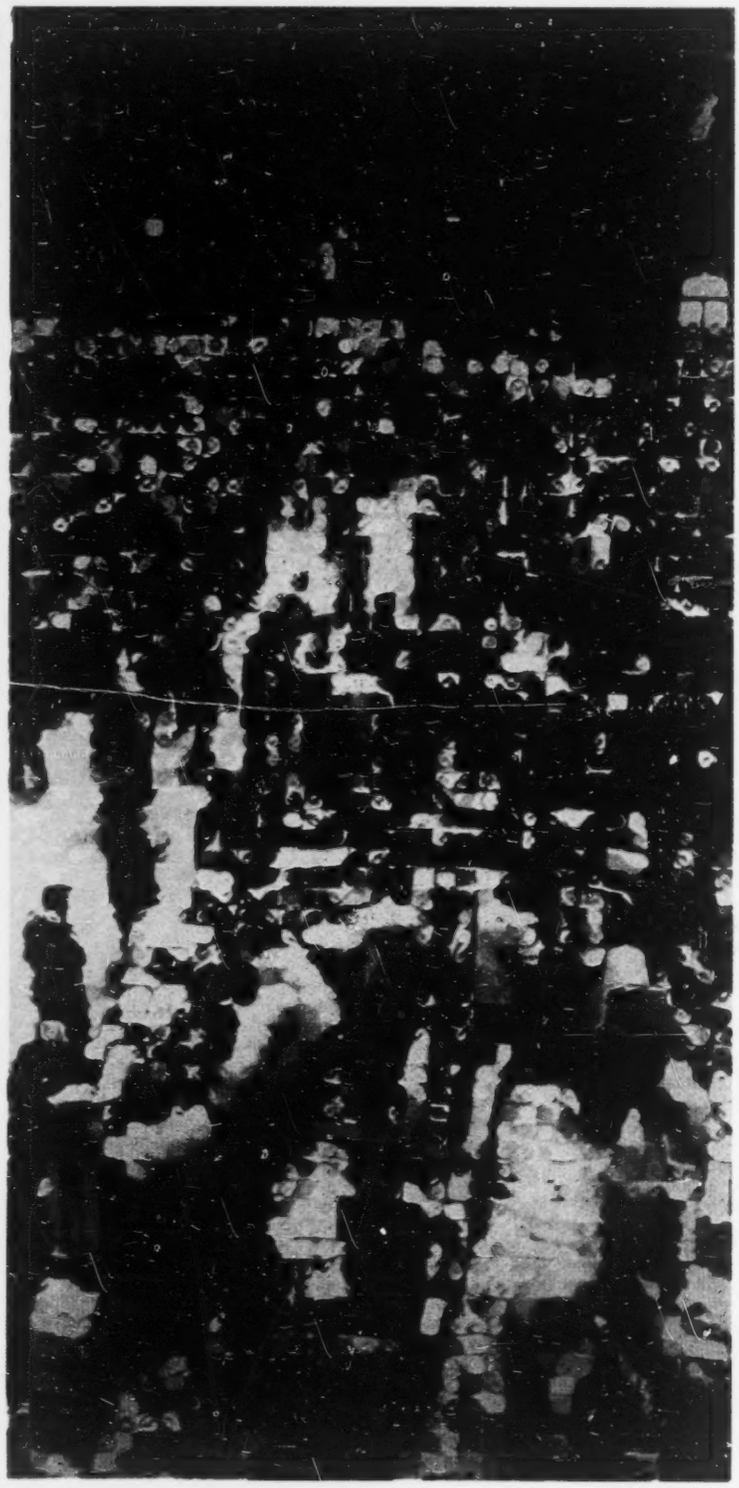

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management in fixed income.

Also, fund trustees were considering whether to proceed with the divestment of stocks of companies in violation of the fund's South African policy.

In January 1985, Marvin L. Damsma, formerly pension fund manager at Kellogg Co., was named third deputy controller, replacing William Badger. In April, the system approved a resolution to help fight discrimination in Northern Ireland by requiring U.S. companies doing business there to sign the MacBride Principles.

In mid-December 1985, the comptroller's office, acting on behalf of the teachers' and Board of Education funds, terminated Favia, Hill & Associates, which ran a total of $2.65 billion in fixed-income assets for the funds.

Also, in the last quarter of 1985, the comptroller's office terminated equity manager MacKay-Shields.

Of the assets overseen by the comptroller, $5.132 billion is managed internally: $4.235 billion in short-term investments; $778 million in bonds; and $119 million in mortgages.

The overall asset mix as of Sept. 30 was 30.7% stocks; 46.5% bonds; 17.3% cash; 1.2% mortgages; and 4.3% mortgage-backed securities.

The system boosted its indexed stocks 27% during the year, to $3.3 billion. It also reported $371 million in indexed bonds and $20 million in mortgages.

The Teachers' Variable Retirement funds totaled $3.2 billion as of Sept. 30, including approximately $52 million in equities it oversees for the Board of Education. Of that, $2.6 billion was in fund "A", which invests primarily in equities, and $572 million was in fund "B", which is in GICs.

During 1985, the teachers' fund adopted resolutions regarding investments in South Africa and Northern Ireland.

The fund hired Wells Fargo to run a $200 million balanced portfolio, funding it with assets from an index fund run by Bankers Trust.

The teachers' hired John A. Levin, Westwood Management and Donald Smith and terminated Value Line and BMI Capital.

The Variable "B" fund awarded $338.6 million in GICs to New York Life Insurance and Prudential Asset Management.

Managers as of Sept. 30 were:

Equity managers (employees' system): Alliance; Bankers Trust; Batterymarch; BEA; Dimensional Fund Advisors; Lazard Freres; Oppenheimer Capital; Provident Capital Management; Stein Roe & Farnham.

(Teachers' system): Alliance; Bankers Trust; Batterymarch; Geo-Capital; Management Asset; McConnell & Miller; Mellon Capital; Prudential Asset; Scudder, Stevens & Clark; Concord Capital; Trinity Investment; ValueQuest; Wells Fargo.

Bond managers: Citibank Investment; Favia, Hill; Fiduciary Trust Co. of New York; Fischer, Francis, Trees & Watts; Lehman Management; Pacific Investment Management Co.

GIC managers (teachers' fund): Metroplitan; Prudential; New York Life.

Citibank is master custodian of the employees' systems; Irving Trust is master custodian of the teachers' fund.

Key personnel for the employees' funds are Mr. Damsma; Robert T.C. Wilson, bureau chief; John J. Burns, senior fixed-income analyst; Lisa M. Malanchuk, senior equity analyst. For the teachers' fund: Wallace Sullivan, executive director; Patrick Kiernan, assistant executive director; Diane Sisenwein, portfolio administrator.

New York State Common Retirement Fund

($ millions)

Total assets	25,997
Defined benefit	25,997
Employer contributions	1,500
Benefit payments	960

ALBANY, N.Y. — In early 1985, John E. Hull replaced Suzanne Jaffe as head of investments for the New York State Common Retirement Fund. Ms. Jaffe had resigned amid controversy caused by a vacation she had taken that was partially paid for by a principal of a securities firm that provides research to the pension system.

During the year, Capital Guardian Trust, Equitable Investment and Lord, Abbett were hired as equity managers; L.F. Rothschild and Favia, Hill were dropped.

The Common Fund's total pension assets climbed 14% during the

25 largest defined benefit plans
($ millions)

Rank	Fund	Assets
1.	California State Public Employees'	$29,166
2.	New York State Common Fund	25,997
3.	General Motors Corp.	22,900
4.	N.Y.C. Retirement Systems	21,849
5.	AT&T	21,035
6.	N.Y.State Teachers System	15,303
7.	California State Teachers	15,100
8.	IBM Corp.	13,139
9.	General Electric Co.	12,866
10.	New Jersey Div. of Investment	12,494
11.	Texas Teachers'	11,188
12.	Ohio Public Employee System	10,760
13.	Michigan State Employees	10,516
14.	Ohio State Teachers System	10,178
15.	Ford Motor Co.	9,500
16.	Wisconsin State Board	9,200
17.	Florida Dept. of Administration	8,911
18.	North Carolina Employees	8,773
19.	NYNEX Corp.	8,000
20.	E.I. du Pont de Nemours	7,841
21.	Pa. Public School Employees	7,825
22.	U.S. Steel Corp.	7,500
23.	Ameritech	7,400
24.	Bell Atlantic Corp.	7,000
25.	Minn. State Board of Invest.	6,800
	Total	$313,241

Funds investing in mortgage-backed securities
($ millions)

Fund	Assets
California Public Employees	$6,066
Texas Teachers	2,479
New York State Common Fund	1,898
New Jersey Div. of Investment	1,499
Florida Dept. of Administration	1,354
Alabama Retirement Systems	1,186
L.A. County Employees	1,115
Michigan State Employees	925
E.I. du Pont de Nemours	863
South Carolina System	847
Illinois Teachers	671
Mass. Employees & Teachers	642
Teamsters Central States	635
Ohio State Teachers	611
NYNEX Corp.	543
Missouri Public Schools	535
Mississippi Public Employees	520
General Electric Co.	515
Pennsylvania Public Schools	509
Maryland State	502
Ford Motor Co.	475
TIAA-CREF	400
Illinois State Board	387
Iowa Public Employees	343
Ohio School Employees	321
L.A. Fire & Police	307
Ohio Police & Firemen	301
Texas Employees	297
Southwestern Bell Corp.	281
Indiana State Teachers	275
Pennsylvania State Employees	260
Louisiana Teachers Retirement System	235
Wisconsin Investment Board	230
Detroit Retirement Systems	222
San Francisco Employees	216
Georgia State Systems	182
United Mine Workers	170
Chicago Municipal Employees	165
Nevada Public Employees	161
Utah State Employees	130
Indiana Public Employees	122
Shell Oil Co.	115
Intl. Union of Oper. Eng.	109
International Harvester	104
Grumman Corp.	97
New Mexico Employees	95
Kentucky Teachers System	93
L.A. Water & Power	93
Inland Steel Co.	80
Bethlehem Steel Corp.	78
American Airlines	69
Oklahoma Teachers System	68
N.Y.C. Retirement Systems	66
Southern Baptist Church	60
Louisiana State Employees	45
World Bank	44
Boeing Co.	39
Aluminum Co. of America	36
Amoco Corp.	36
GTE Corp.	24
Arkansas Teacher System	23
University of California	21
Ashland Oil	19
West Virginia Employees	12
Philadelphia Municipal Employees	11
Conoco Inc.	10
Unocal Corp.	9
Total	$30,842

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year ended Sept. 30, to $25.997 billion from $22.8 billion (equity assets calculated at market, other investments at book).

Internally run assets increased 14.5%, $22.792 billion from $19.9 billion. Of that, $6.979 billion was in equities; $13.988 billion in fixed income; $1.709 billion in short-term instruments; $116 million in venture capital.

About $6.751 billion of the New York fund's assets are in indexed stocks; $116 million in venture capital; and $2.596 billion in mortgages.

The system's asset mix as of Sept. 30 was 39.2% stocks, 36.5% bonds, 6.6% cash equivalents, 10% mortgages, 7.3% mortgage-backed securities and 0.4% venture capital.

The fund uses outside managers only for equities.

Equity managers: Alliance; Bank of New York; Capital Guardian; Equitable Investment; Lazard Freres; Lord, Abbett; Oppenheimer Capital; J&W Seligman; Shearson Lehman.

Chase Manhattan is the master trustee.

Aside from Mr. Hull, key personnel are John J. O'Connor, chief investment officer and William M. Barrett, director-fixed-income and equity.

New York State Teachers' Retirement System

	($ millions)
Total assets	15,303*
Defined benefit	15,303
Employer contributions	890
Benefit payments	532

*as of June 30, 1985

NEW YORK — The New York State Teachers' Retirement System grew by 19.3% during the year ended June 30 to about $15.3 billion from about $12.82 billion.

During the year, the fund added new equity managers Beutel Goodman, General American Investors, Pilgrim Baxter and Glickenhaus.

The fund manages $12.644 billion internally: $4.217 billion in equity; $5.85 billion in fixed income; $939 million in short-term investments; and $1.638 billion in mortgages.

The fund has allocated $50 million to venture capital investments, including Excelsior 2, MFS, New York State Business Venture Partnership and Norstar Bancorp.

There is $43 million committed to real estate equity and $1.595 billion in mortgages. The fund uses stock options.

The asset mix as of June 30 was 42.3% stocks, 39.4% bonds, 5.3% cash equivalents, 0.2% real estate equity, 10.6% mortgages and 2.2% in receivables and member loans.

Equity managers: Sanford Bernstein; Lehman Management; Oppenheimer Capital; BEA Associates; Beutel Goodman; General American Investors; Pilgrim Baxter; Glickenhaus; Manufacturers Hanover.

Bond manager: Sanford C. Bernstein.

Real estate managers: Aetna; Equitable; Prudential Asset; Goldman, Sachs.

Bankers Trust is custodian.

Key personnel are Harold N. Langlitz, executive director; Edward J. Reno, Jr., securities investment officer; and Lowell A. Blom, mortgage officer.

North Carolina Retirement Systems

	($ millions)
Total assets	8,733*
Defined benefit	8,733
Employer contributions	700
Benefit payments	na

*as of June 30, 1985

RALEIGH, N.C. — The assets of the North Carolina Retirement System increased 9.6%, to $8.733 billion (book value) as of June 30, from the $7.967 billion reported as of Sept. 30, 1984.

The $700 million in contributions includes those made by employees.

The system uses stock options.

As of June 30, the asset mix was 20.6% stocks, 78.1% bonds, 0.3% cash equivalents and 1% real estate. The bond holdings include mortgage-backed securities.

Except for $88 million in real estate equity, the fund is internally managed, with outside equity and bond managers acting in advisory roles.

Equity advisers: Alliance; First Citizens Bank; First Union; NCNB; Thorndike, Doran; Wachovia.

Bond advisers: Duff & Phelps (credit analysis only).

Real estate managers: Aetna; CIGNA; Goldman, Sachs.

The custodian is Bank of New York.

C. Douglas Chappell, deputy treasurer and director-investment and banking division, oversees investment management of the fund.

A look at managers: May 19.

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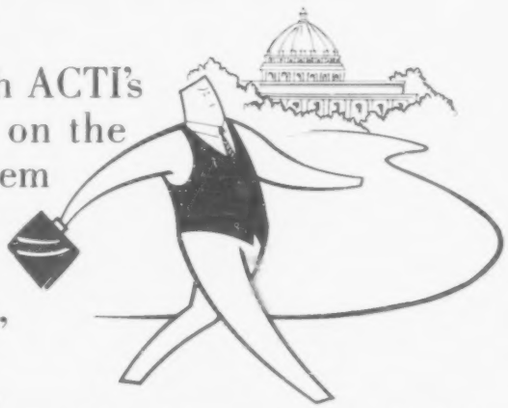

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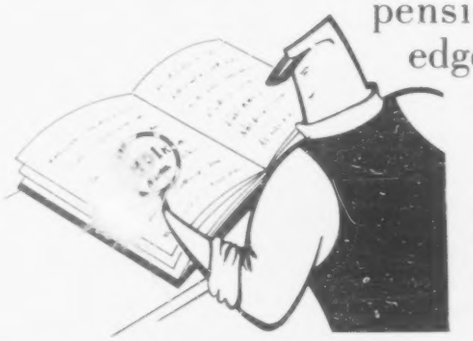

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PD-1

Northrop Corp.

($ millions)	
Total assets	2,142
Defined benefit	1,400
Profit-sharing	742
Employer contributions	130
Benefit payments	36

LOS ANGELES — Northrop Corp.'s employee benefit assets increased 26%, to $2.142 billion as of Sept. 30 from $1.7 billion a year earlier.

Richard B. Lohrer, treasurer, cited the strong markets for both stocks and bonds and a 58% increase over the 21 months ended Sept. 30 in the value of a block of Northrop stock held by the profit-sharing plan as reasons for the increase.

Northrop uses no alternative or passive investments in its pension fund. The asset mix as of Sept. 30 was 67% stocks, 27% bonds and 6% cash equivalents.

Equity managers: Capital Guardian; Forstmann-Leff; Putnam Advisory; Rosenberg Capital; Jennison Associates; State Street Research.

Bond managers: Jennison; Fischer, Francis, Trees & Watts.

Bankers Trust is the master trustee.

Mr. Lohrer oversees employee benefit asset investments.

NYNEX Corp.

($ millions)	
Total assets	09,447
Defined benefit	8,000
Defined contribution	62
Thrift or savings	1,200
Other	185
Employer contributions	240
Benefit payments	408

NEW YORK — NYNEX Corp. experienced an increase in total employee benefits of 114.7%, to $9.447 billion on Sept. 30 from $4.4 billion as of June 30, 1984.

The fund has $1.2 billion in a savings plan, $185 million in an ESOP and $62 million in a defined contribution plan.

The massive increase in total employee benefit assets was attributable to the transfer of pension assets, completed in 1985, to NYNEX from the American Telephone & Telegraph Co.

NYNEX hired equity managers Batterymarch; Citicorp; Vanguard; Miller, Anderson & Sherrerd; and Western Asset Management.

Previous managers Brundage, Story & Rose and Oakwood were dropped from fixed-income accounts and Equitable was dropped from an equity index fund.

The pension asset mix Sept. 30 was 57% stocks, 24% bonds, 8% real estate equity, 5% cash, 6% mortgage-backed securities.

About $2.85 billion is in equity index funds and $1.2 billion in bond index funds. The fund has committed $4.49 million to venture capital and $633 million to real estate equity.

The fund hedges its fixed-income portfolio with futures.

Equity managers: American National Bank; Bankers Trust; Batterymarch; Citicorp; Manufacturers Hanover; TCW; McCowan Associates; State Street Research; Vanguard; Wertheim.

Bond managers: Boston Co.; Brown Brothers; Jennison Associates; John Hancock; Manufacturers Hanover; Massachusetts Financial Services; Miller, Anderson & Sherrerd; U.S. Trust; Western Asset.

GICs (for savings plan only): Aetna; CNA; Connecticut Mutual Life; Connecticut General; Travelers; Massachusetts Life; Metropolitan; New England Life.

Mellon Bank is the master trustee.

Key personnel are Joseph Clines, assistant director of finance, and John Eshemuller and Robert Wysocki, financial operations managers.

The annual PIPER report: Feb. 17.

Ohio Public Employees Retirement System

($ millions)	
Total assets	10,760
Defined benefit	10,760
Employer contributions	630
Benefit payments	570

COLUMBUS, Ohio — The Ohio Public Employees Retirement System had $10.76 billion in assets at Sept. 30, a 25.3% increase from $8.584 billion reported a year earlier.

During the year, the fund dropped Wachovia National Bank & Trust as a real estate manager, replacing it with NCNB National Bank.

The approximate asset mix as of Sept. 30 was 19% stocks, 46.7% bonds, 14% cash equivalents, 2% real estate equity, 18% mortgages and 0.3% venture capital.

Most of the assets, $10.5 billion, are managed in-house: roughly $2 billion in equities; $7 billion in fixed income; and $1.5 billion in short-term investments.

The fund has invested $25 million in venture capital, $170 million in real estate equity and $2 billion in mortgages.

Real estate managers: CIGNA; Aetna; Security Capital; NCNB.

Robert A. McLaughlin is the fund's investment officer.

Ohio Teachers Retirement System

($ millions)	
Total assets	10,178
Defined benefit	10,178
Employer contributions	515
Benefit payments	565

COLUMBUS, Ohio — The State Teachers Retirement System of Ohio had $10.178 billion in employee benefit assets as of Sept. 30, an increase of 19.6% from $8.507 billion a year earlier.

Soon business

It will have $515 million in employer contributions for 1985, up 10% from 1984, and benefit payments of $565 million, up 7.2%.

The fund has $140 million in dedicated or immunized bond funds, $15 million in venture capital, $1.3 billion in real estate equity and $907 million in mortgages. It uses stock options and fixed-income futures.

As of Sept. 30, the approximate asset mix was 31% stocks, 26% bonds, 13% cash equivalents, 13% real estate equity, 10% mortgages, 6% mortgage-backed securities and 1% miscellaneous.

The fund is internally managed, but uses Thorndike, Doran, Paine & Lewis as consultant for equities and bonds and Thomas Karsten Associates as consultant for real estate.

Key personnel overseeing the investment management of the fund are C. James Grothaus, executive director, and Stephen A. Mitchell, assistant executive director-investments.

Oregon Public Employes Retirement System

($ millions)	
Total assets	5,100
Defined benefit	5,100
Employer contributions	410
Benefit payments	200

SALEM, Ore. — The Oregon Public Employes Retirement System benefit assets totaled $5.1 billion as of Sept. 30, an increase of 21.4% from the $4.2 billion reported a year earlier.

In 1985, the Oregon system made a $200 million contribution to the latest leveraged buy-out fund of Kohlberg Kravis & Roberts. It committed $5 million each to MWB Venture Partners and Morgenthaler Venture Partners and $10 million to Oppenheimer-Palmieri Workout Fund.

It also hired Wertheim-Phillipe International as an international manager.

The fund received $410 million in employer contributions in 1985 and made benefit payouts of $200 million.

It manages $2.5 billion internally, all in fixed income.

It also has $193 in international equities; $88 million in venture capital; $360 million in real estate equity; and $420 million in mortgages.

As of Sept. 30, the asset mix for the pension fund was 50% stocks, 35% bonds, 7% real estate equity and 8% mortgages.

Equity managers: BEA; Columbia Management; Rosenberg Capital; Fayez Sarofim; Batterymarch; Harris Associates; Quest Advisory; William Witter; General American; Glickenhaus; Hotchkis & Wiley; Froley, Revy.

Real estate managers: Alex Brown Realty Advisors.

Leveraged buy-outs: Kohlberg Kravis & Roberts.

International managers: ABD; Globe Finlay; Rowe Price-Fleming; DAICAM; Wertheim-Phillipe.

Some of the fund's managers use stock options, stock index futures and fixed-income futures.

Master trustee is First Interstate Bank of Oregon.

Key personnel involved in investments are James C. George, investment manager; and William Unverzagt, investment officer.

P

Pacific Gas and Electric Co.

($ millions)	
Total assets	2,482
Defined benefit	1,655
401(k)	827
Employer contributions	122
Benefit payments	78

SAN FRANCISCO — Pacific Gas and Electric Co. increased the amount of pension assets invested in stock index funds 86.2% to $184.3 million in 1985 from $99 million the previous year. Company officials would not comment on the increase.

PG&E also increased its allocation to equity real estate 68.5% to $126.4 million from $75 million in 1984.

The company decreased its investments in GICs 54.7% to $33.1 million from $73 million a year earlier. The decrease resulted from the maturation of two contracts.

In March 1985, PG&E released Modern Portfolio Theory Associates as an equity manager. The company reallocated the assets among existing managers.

As of Sept. 30, total employee benefit assets had increased 20% to $2.482 billion from $2.068 billion the previous year. Of the total, $1.655 billion was in defined benefit assets, an increase of about 16% from $1.424 billion a year earlier.

The company's 1985 employer contributions increased 12.3% to $122.4 million from $109 million in 1984. Benefits paid to retirees in 1985 increased 11.1% to $77.8 million from $70 million the previous year.

Equity managers: Barrow, Hanley, Mewhinney & Strauss; Beutel Goodman; Cashman, Farrell; Chase Investors; Dodge & Cox; Endowment Management; Frontier; Jundt/Capen; McCowan; Miller, Anderson & Sherrerd; Olympic; Rosenberg Capital; State Street Bank.

Bond managers: Fischer, Francis; Miller, Anderson; T. Rowe Price.

Real estate managers: Corporate Property; Metropolitan; Prudential; RREEF; TCW Realty.

GIC managers: John Hancock; Metropolitan; New York Life.

GACs: Metropolitan; Prudential.

Private placements: Prudential.

As of Sept. 30 the asset mix was 62% stocks, 15% bonds, 5% cash equivalents, 8% equity real estate, 2% GICs and 8% general account contracts.

State Street Bank is master trustee.

Key investment personnel are Stanley T. Skinner, vice chairman; Gordon R. Smith, vice president-finance and treasurer; and Janice K. Murphy, director-pension fund management.

Pacific Telesis Group

($ millions)	
Total assets	6,316
Defined benefit	5,703
Defined contribution	613
Employer contributions	223*
Benefit payments	294*

*defined benefit plan only

SAN FRANCISCO — Pacific Telesis Group's employee benefit assets totaled $6.316 billion as of Sept. 30, an increase of 19.2% from the $5.3 billion reported the previous year.

In 1985, Pacific Telesis hired real estate managers LaSalle Advisors, Jones Lang Wootton and TCW Realty.

As of Sept. 30, the retirement fund pension asset mix was: 53% stocks, 25% bonds, 4% cash equivalents, 8% real estate equity and 10% international securities.

Managers: ADB International; Capital Guardian; Chase Investors; CMB Investment Counselors; Delphi; Discount Corp. of New York; Dodge & Cox; Fidelity International; Fischer, Francis, Trees & Watts; Hotchkis & Wiley; IDS Advisory; Jones Lang Wootton; Jundt/Capen Associates; Lord, Abbett; Mellon Capital; Morgan Grenfell; Pacific Investment; Pilgrim, Baxter, Hoyt & Greig; Rosenberg Capital; Rothschild International; Sit Investment; Solomon Asset Management; State Street Research; Thompson, Siegel & Walmsley; United Capital; Wellington; Wells Fargo; Western Asset.

Bank of America is the master trustee.

Key personnel overseeing investment are Richard E. Holmes, director-investment management; Jeffrey L. Winter, manager-investment planning and strategy; and Honor R. Fetherston, manager-investment administration and real estate.

Pennsylvania Public School Empioyes' Retirement System

	($ millions)
Total assets	7,825
Defined benefit	7,825
Employer contributions	763
Benefit payments	535

HARRISBURG, Pa. — In December, the Pennsylvania Public School Employes' Retirement System picked Bankers Trust and J.P. Morgan to run Standard & Poor's 500 index fund accounts.

Under the arrangement, Bankers Trust will run $400 million and Morgan, $200 million. The index funds will be hedged with futures contracts.

The fund already had $3 billion in index funds run by Mellon Bank; two-thirds of those assets are in bond funds.

The $7.825 billion fund also made several key money manager changes during the 12 months ended Sept. 30.

It hired Miller, Anderson & Sherrerd to run a $100 million balanced account; Delaware Investment Advisers to manage a $125 million equity account; Cashman, Farrell to manage $50 million in stocks (later boosted to $150 million); and Glenmede Trust to manage a $280 million bond account. All of those firms are based in Pennsylvania.

The fund dropped MacKay-Shields and State Street Research as equity managers of $150 million and $250 million, respectively.

In addition, the fund installed a covered call option program for all of its equities. Selected to run those programs were Bankers Trust and Oppenheimer Option Management.

The fund also made its first venture capital investments, committing $20 million to Century IV and $1 million to a NEPA fund.

Equity managers: Bankers Trust; Cashman, Farrell; Delaware Investment Advisers; Mellon; Miller, Anderson & Sherrerd; J.P. Morgan; Oppenheimer Capital; Provident.

Bond managers: Glenmede Trust; Loomis, Sayles; Mellon; Miller, Anderson & Sherrerd; Pittsburgh National Bank.

Real estate managers: Fidelity Bank; Jones Lang Wootton.

Options managers: Bankers Trust; Oppenheimer Option Management.

Venture capital: Century IV; NEPA.

As of Sept. 30, fund assets grew to $7.825 billion, up 18.6% from the $6.597 billion the year before.

Employer contributions rose 25%, to $763 million from $609 million, and benefits paid out dropped almost 13%, to $535 million from $613 million in 1984.

The increase was due to a 1984 court decision against pension contribution legislation.

The asset mix as of Sept. 30 was 25.9% stocks, 40% bonds, 13% cash, 7.3% real estate equity, 7.3% mortgages and 6.5% mortgage-backed securities.

The fund manages $504 million internally in short-term investments.

The fund had $580 million in real estate equity, $571 in mortgages and $21 million in venture capital.

First Pennsylvania Bank is the master trustee.

Overseeing the fund are James A. Perry, executive director, and Clay B. Mansfield, investment administrator.

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Pennsylvania State Employes' Retirement System

	($ millions)
Total assets	5,418
Defined benefit	5,418
Employer contributions	450
Benefit payments	445

HARRISBURG, Pa. — The Pennsylvania State Employes' Retirement Fund hired four small- to medium-cap equity managers and five venture capital managers in December. All of the managers are based in Pennsylvania.

For equities, the fund picked Pilgrim Baxter Hoyt & Greig to run $100 million; McGlinn Capital Management, $50 million; Geewax, Terker, $50 million; and First Pennsylvania Bank, $25 million.

The venture capital managers will have an in-state investment bias. Selected were Butcher & Singer Keystone Venture II L.P., $5 million; PNC Venture Group I, $5 million; Fostin Capital Associates, $10 million; TDH II Ltd., $9 million; and NEPA, $1 million.

The fund's new chief investment officer, Kenneth G. Mertz II, joined the fund in November from Dauphin Deposit Bank & Trust, where he was an equity manager. He replaced Gary Sipe, who had come on board in June 1984 but left 10 months later to join Northeastern Bank of Pennsylvania.

In July, the fund dropped Trustee & Investors as manager of a $153 million equity portfolio, with assets shifted to We'ls Fargo. Equitable, which had been picked as a real estate manager in 1984, never was funded. The fund also dropped its stock option program, terminating Analytic Investment Management; Balch, Hardy & Scheinman; and Travelers Investment.

The fund set up a $350 million in-house bond portfolio.

The trustees gave existing manager Miller, Anderson & Sherrerd permission to invest in currency plays in foreign fixed-income markets. Nearly $13 million was invested in these assets as of Sept. 30.

As of Sept. 30, the fund had:

Equity managers: Fred Alger; Alliance; Barrow, Hanley, Mewhinney & Strauss; Glickhenhaus; Mellon; Trinity; Wells Fargo.

Bond managers: Mellon; Miller, Anderson & Sherrerd; Payden & Rygel.

Real estate managers: Aetna; Corporate Property Investors; F.I.A. Associates; John Hancock; JMB Institutional; Prudential; Security Capital; Philadelphia Savings Fund Society.

The fund boosted its commitment to passive management, increasing indexed equity assets to $998 million as of Sept. 30, from $544 million the year before. In-

dexed bond assets rose to $525 million from $432 million 12 months earlier.

As of Sept. 30, the $5.418 billion fund grew 21.7%, from $4.453 billion the year before.

The asset mix was 35.9% stocks, 34.3% bonds, 11.8% cash equivalents, 7.5% real estate equity, 5.7% mortgages and 4.8% mortgage-backed securities. Those figures represent a major shift from 1984, when cash equivalents comprised 34.2% of the fund and bonds only 16.3%.

The state treasurer is the master trustee.

Besides Mr. Mertz, key investment personnel are David D. Burnett and Karen Nicely, investment analysts.

Phillips Petroleum Co.

($ millions)	
Total assets	2,109
Defined benefit	1,359
Thrift and 401(k)	750
Employer contributions	25
Benefit payments	355

BARTLESVILLE, Okla. — Because of an almost quintupling of benefit payments, Phillips Petroleum Co.'s pension assets fell 7.2% to $1.359 billion as of Sept. 30 from $1.464 billion a year earlier.

Phillips instated an early retirement program as part of a corporate restructuring in the aftermath of fighting off hostile takeover attempts by T. Boone Pickens and Carl Icahn. Phillips' benefit outlays in 1985 totaled $355 million, compared with $74 million the previous year. The rise in payments was further heightened by retiring employees taking lump-sum payments as opposed to annuities.

Despite the increased payments, Phillips made no contribution to its pension plan in 1985. Because of the plan's overfunded condition, it hasn't made a contribution since 1982. Phillips, however, contributed $25 million in 1985 to employees' combined thrift and 401(k) savings plans.

In 1985 it dropped equity accounts with Citibank, MacKay-Shields and Travelers, but retained them in other areas.

In real estate equity, Phillips boosted its investment with RREEF by $14 million. Also, it assigned JMB an additional $15 million.

Except for real estate, its asset mix was largely unchanged from the previous year. Its real estate equity rose to $126 million, raising the allocation to almost 10% from 6% in 1984.

Its asset mix as of Sept. 30 was 58% stocks, 9.5% bonds, 9.5% real estate equity, 2.5% mortgages, 11.2% GICs and 9.3% annuities.

Among the funds assets are $227 million in indexed stocks, $152 million in GICs, $35 million in mortgages and $30 million in foreign stocks.

Equity managers: Morgan Guaranty; Barrow, Hanley, Mewhinney & Strauss; Capital Guardian Trust; Wells Fargo, Rogers Casey & Barksdale.

Bond managers: MacKay-Shields; Forstmann Little; Equitable; Citibank.

GICs: Travelers, Aetna.

Annuities: Metropolitan.

Real estate managers: Morgan Guaranty; JMB; RREEF; Aetna; Victor Palmieri.

Of Phillips' fixed-income investments, Forstmann Little invests in leveraged buy-outs and Equitable, in private placements.

Its master trustee is Citibank.

Overseeing employee benefit assets are R.E. Bonnell, senior vice president and treasurer; G.R. Barnett, director-pension investments; and Margaret H. Lou, senior financial investment specialist.

Procter & Gamble Co.

($ millions)	
Total assets	2,123*
Defined benefit	28
Profit-sharing	2,095
Employer contributions	160
Benefit payments	153

*as of June 30, 1985

CINCINNATI — Procter & Gamble Co.'s total employee benefit assets increased 12.6% to $2.123 billion from $1.886 billion in the 12 months ended June 30, 1985.

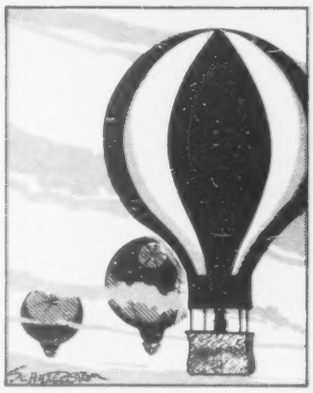
Employer contributions increased 9.5% to $160 million. Benefit payments totaled $153 million, but no comparable figure for 1984 was available.

The primary retirement plan is a profit-sharing plan, for which the investment options are guaranteed investment contracts and company stock.

GIC manager: Aetna.

Equity managers: The Griffin Group; T. Rowe Price.

Bond manager: The Griffin Group.



Funds using bond options

Arkansas Public Employees
Chrysler Corp.
E.I. du Pont de Nemours
Episcopal Church
IBM Corp.
Illinois State Universities
Illinois Teachers
International Paper
Kansas Public Employees
Monsanto Co.
North Carolina Employees
Southern California Edison
Tennessee Consolidated
Travelers Insurance Co.
Union Carbide Corp.
United Telecommunications
Upjohn Co.
Westinghouse Electric Corp.

Funds using stock options

Alabama Retirement Systems
Allied-Signal Inc.
Caterpillar Tractor Co.
Chrysler Corp.
Colorado Public Employees
Dart & Kraft Inc.
Delta Air Lines Inc.
Dow Chemical Co.
Eastman Kodak
Eaton Corp.
Episcopal Church
Exxon Corp.
Florida State Board
GTE Corp.
General Electric Co.
General Foods Corp.
Grumman Corp.
Illinois State Universities
Illinois State Board
Inland Steel Co.
International Union of Oper. Eng.
Kansas Public Employees System
K mart Corp.
L.A. Water & Power
L.A. Fire & Police
Mass. Employees & Teachers
Minnesota State Board
Monsanto Co.
N.Y. State Teachers
New Jersey Division of Investment
Ohio School Employees
Ohio State Teachers
Oregon Public Employees
Pennsylvania Public School
R.J. Reynolds
Rhode Island Employees
Sears, Roebuck & Co.
Shell Oil Co.
So. California Edison
So. New England Telephone Co.
Sperry Corp.
Sun Co.
Tennessee Consolidated
Texas Instruments Inc.
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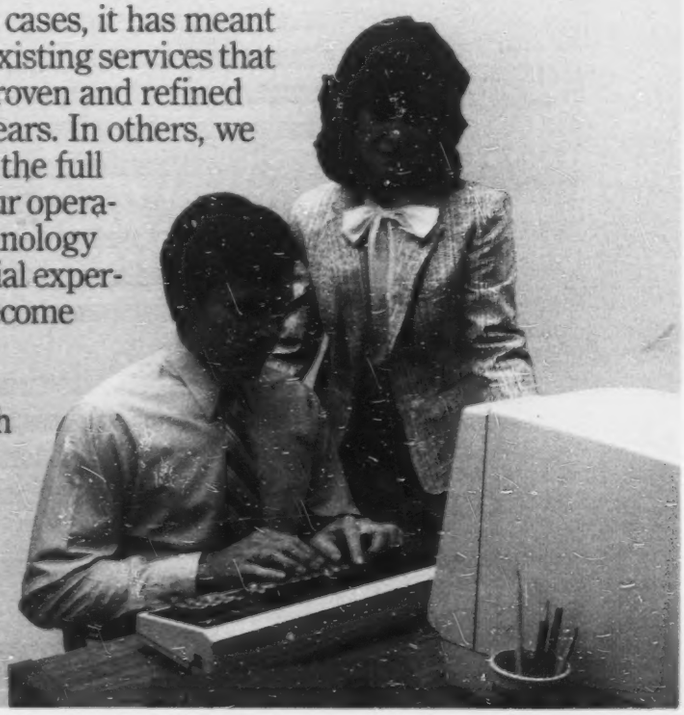

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Wachovia

Funds investing in oil and gas
($ millions)

Fund	Assets
AT&T	$241
GTE Corp.	45
Exxon Corp.	41
Honeywell Inc.	40
Minnesota State Board	30
Southwestern Bell Corp.	30
Caterpillar Tractor Co.	26
Ford Motor Co.	25
Allied-Signal Inc.	20
TIAA-CREF	15
Episcopal Church	10
ITT Corp.	10
Monsanto Co.	10
United Technologies Corp.	10
Xerox Corp.	5
Owens-Illinois Inc.	3
U S WEST	1
Commonwealth Edison Co.	NA
Total	**$562**

As of June 30, the approximate asset mix was 57% stocks, 1% bonds, 8% cash equivalents and 34% GICs.

The fund manages $1.365 billion in assets internally. Of that, $1.19 billion is in equities and $175 million is in short-term investments.

Key investment management personnel are E.H. Eaton, vice president-treasurer; K.V. Duncan, manager, investments; and J.R. Smith, manager, pension plan coordination.

Prudential Insurance Company of America

	($ millions)
Total assets	02,793*
Defined benefit	2,793
Employer contributions	50
Benefit payments	118

*P&I Age estimate

NEWARK, N.J. — The employee benefit assets of Prudential Insurance totaled $2.793 billion as of Sept. 30, according to *Pensions & Investment Age* estimates based on the fund's own figures as of Dec. 31, 1984.

Employer contributions were reported at $50 million in 1985, while benefits paid out were $118 million.

All assets are managed in-house.

The asset mix as of Dec. 31, 1984 was 51% stocks, 24% fixed-income, 19% real estate equity and mortgages and 6% cash equivalents.

The fund had international equities of $230 million and international fixed-income investment of $76 million as of the same date.

The fund has $110 million in indexed stocks and $523 million in real estate equity and mortgages.

Investment policy is determined by a committee of three senior officers.

RCA Corp.

	($ millions)
Total assets	02,702
Defined benefit	2,213
Defined contribution	489
Employer contributions	na
Benefit payments	na

NEW YORK — RCA Corp.'s total employee benefit assets increased 8% to $2.702 billion as of Sept. 30 from $2.5 billion a year earlier.

Equity managers: Batterymarch; Chase Index Fund; First Chicago Investment Advisors; T. Rowe Price; Fayez Sarofim; State Street Research; J.P. Morgan Investment Advisors; Endowment Management.

Bond manager: Lincoln Capital Management.

International managers: N.M. Rothschild; J.P. Morgan; Fidelity.

GICs: Aetna Life & Casualty; Travelers.

Bankers Trust Co. is master trustee.

The asset mix as of Sept. 30 was 55% domestic stocks, 5% foreign stocks, 20% bonds, 10% real estate equity and 10% GICs.

Pamela W. McCann is staff vice president and assistant treasurer; Howard A. Freiman is director-pension funds management.

R.J. Reynolds Industries

	($ millions)
Total assets	2,361
Defined benefit	1,920
Profit-sharing	15
Thrift or savings	426
Employer contributions	83
Benefit payments	100

WINSTON-SALEM, N.C. — R.J. Reynolds Industries' employee benefit assets increased by 49.2% during the year ended Sept. 30, largely because of its acquisition of Nabisco Brands Inc.

Along with the $516 million in Nabisco assets, Reynolds picked up the following Nabisco managers: Fischer, Francis, Trees & Watts; Bankers Trust; Forstmann-Leff; Hellman, Jordan; Lieber Capital; McKenzie Walker; Vanguard; Copley; Mellon Capital; and Prudential.

For 1985, its employer contribution to the benefit plans was $83 million, an increase of 59.6% from 1984's $52 million. Benefit payments totaled $100 million, an 82% increase from the $55 million paid in 1984. These increases also were attributed to the Nabisco acquisition.

During the year, Reynolds also announced the formation of RJR Investment Management Inc., which as of Sept. 30 had $402 million in Reynolds pension assets under management, including a $250 million dedicated bond portfolio previously managed by Morgan Guaranty.

The fund has a total of $487 million in dedicated or immunized bond funds and also reported $72 million in indexed stocks, $12 million in foreign equity, $14 million in venture capital and $114 million in real estate equity.

It uses stock options, stock index futures and fixed-income futures.

Following Reynolds' acquisition of Nabisco, James A. Reavis, Nabisco's director of pension asset management, announced he would join Bankers Trust — Investment Management Group, New York, as a managing director.

Equity managers (defined benefit): Bankers Trust; Batterymarch; Capital Guardian; Delaware Investment; Forstmann-Leff; Lieber Capital; MacKay-Shields; McKenzie Walker; Reich & Tang; Warburg Pincus.

(401(k)/thrift): Alliance; Bernstein-Macaulay; Vanguard; Wilkens & Nanovic.

Bond managers (defined benefit): Fischer, Francis, Trees & Watts; Pacific Investment Management; Scudder, Stevens.

(401(k)/thrift plan): Wachovia Bank & Trust.

Real estate managers: Copley; Mellon Capital; Prudential; Wachovia.

International manager: Globe Finlay.

Venture capital managers: Concord Partners; Plant Resources; Advent; DeMuth, Folger & Terhune; NBW Venture Partners; Fairfield Venture Partners.

Options managers: Bear Stearns; The Travelers.

The approximate asset mix as of Sept. 30 was 62.7% stocks, 28.1% bonds, 3.6% cash equivalents, 4.8% real estate equity and 0.8% venture capital.

The master trustee is Wachovia.

Key investment personnel: Gwain H. Gillespie, executive vice president and chief financial officer; John W. Dowdle, senior vice president-financial services; and Gene A. Hoots, president, RJR Investment Management.

Rockwell International

	($ millions
Total assets	5,218
Defined benefit	na
Thrift or savings	na
Employer contributions	403
Benefit payments	na

*as of Dec. 31, 1984

PITTSBURGH — Rockwell International hired Mellon Bank as master trustee in February 1985, replacing Chase Manhattan.

The company also reportedly hired Baillie Gifford, Edinburgh, Scotland, to manage equities.

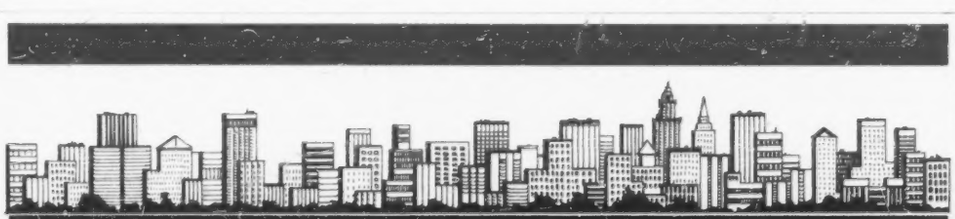
Rockwell had $5.218 billion in employee benefit assets as of December 1984, according to the 1986 Money Market Directory.

The fund received $403 million in contributions in 1985.

Managers (according to the MMD): Beutel Goodman; Boston Co. Real Estate; Capital Guardian; Cashman, Farrell; Chase Investors; CIGNA; First Interstate Bank of California; First Pacific; Guardian Life; Hotchkis & Wiley; InterFirst Bank of Dallas; InterFirst Investment Management; Manufacturers National Bank of Detroit; Mellon Bank, Metropolitan Life; J.P. Mor

Funds investing in venture capital
($ millions)

Fund	Assets
General Electric Co.	$313
AT&T	290
Washington State Board	202
Michigan State Employees	149
New York State Common Fund	116
Honeywell Inc.	105
Bell Atlantic Corp.	100
University of California	91
Oregon Public Employees	88
GTE Corp.	73
Exxon Corp.	60
Ameritech	52
Sears, Roebuck & Co.	51
Ford Motor Co.	50
U S WEST	47
FMC Corp.	40
Minnesota State Board	40
N.Y. State Teachers	40
Aluminum Co.of America	35
Chicago Municipal Employees	35
Delta Air Lines Inc.	35
United Technologies Corp.	35
Southwestern Bell Corp.	30
World Bank	29
Conoco Inc.	29
Grumman Corp.	25
Ohio Public Employees	25
Westinghouse Electric Corp.	25
Ohio School Employees	23
Pennsylvania Public School	21
Dow Chemical Co.	20
Dresser Industries	20
Armco Inc.	19
General Foods Corp.	18
TRW Inc.	18
Deere & Co.	17
Owens-Illinois Inc.	17
Colorado Public Employees	15
Ohio State Teachers	15
Utah State Employees	15
R.J. Reynolds	14
Dart & Kraft Inc.	13
Illinois State Board	11
Allied-Signal Inc.	10
Illinois Teachers	10
John Hancock Mutual Life	10
Minnesota Mining & Mfg.	10
Ohio Police & Firemen	10
Southern California Edison	10
Sperry Corp.	10
Eaton Corp.	8
Texas Instruments Inc.	7
Unocal Corp.	7
Detroit Retirement Systems	7
Citicorp	5
Eli Lilly & Co.	5
Inland Steel Co.	5
NYNEX Corp.	5
Nevada Public Employees	4
KMI Continental	3
Illinois Municipal Employees	2
Pennsylvania State Employees	NA
Presbyterian Church	NA
Total	**$2,594**



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E.W. Alstaetter, staff vice president-pensions, insurance and risk management, oversees the fund.

S

City and County of San Francisco Employees Retirement System

	($ millions)
Total assets	2,157
Defined benefit	2,157
Employer contributions	210
Benefit payments	155

SAN FRANCISCO — The San Francisco fund hired Carolyn Hamilton as assistant chief of investments during the year ended Sept. 30.

Pension assets increased 27% to $2.157 billion as of Sept. 30, from $1.7 billion a year earlier. Strong performances of both the stock and bond markets were responsible for the increase, said DeWitt Bowman, chief investment officer.

The fund manages $1.082 billion internally, $1.024 billion in fixed income and $58 million in equities.

Equity managers: Crocker Investment Management; Eaton Vance; Loomis Sayles; George Sparks.

Bond managers: Bankers Trust; Lehman Asset; MacKay-Shields; Scudder, Stevens.

Real estate manager: Coldwell Banker.

Index manager: Great American Core Investors.

The asset mix as of Sept. 30 was 49% stocks, 47% bonds, 5% cash equivalents, 5% real estate equity, 4% mortgages and mortgage-backed securities.

Bankers Trust is master custodian.

The fund had $98 million in an indexed stock fund. Its real estate investments are $104 million in equity, $84 million in mortgages and $210 million in mortgage-backed securities, which are 80% federally guaranteed and the majority issued by the Government National Mortgage Association.

Key investment personnel are Mr. Bowman, Ms. Hamilton and Diane Gale, also an assistant chief of investment.

Sears, Roebuck & Co.

	($ millions)
Total assets	5,481
Defined benefit	1,915
Profit-sharing	3,566
Employer contributions	na
Benefit payments	na

CHICAGO — Sears, Roebuck & Co.'s total employee benefit assets increased 14% to $5.481 billion in the year ended Sept. 30, from $4.808 billion. Its pension assets grew by 23.6%, to $1.915 billion as of Sept. 30 from $1.549 billion a year earlier.

Sears hired Aldrich, Eastman and Waltch during the year for a number of real estate investments and allocated the following for international investment: $33 million to Capital Guardian; $27 million to Putnam International; and $45 million to Fidelity International.

The approximate asset mix as of Sept. 30 was 46% stocks, 38% bonds (including mortgage-backed securities), 4% cash equivalents, 2% real estate equity, 3% venture capital and 7% foreign equities.

The firm manages $1.766 billion in-house through Sears Investment Management Co.: $883 million in equities; $72 million in short-term investments; $730 million in fixed income; and $81 million in other investments.

The fund has invested $566 million in indexed stocks, $129 million in foreign equity, $51 million in venture capital and $50 million in real estate equity.

It uses stock options and stock index futures.

Real estate manager: Aldrich, Eastman & Waltch.

International managers: Capital Guardian; Fidelity International; Putnam International.

Continental Illinois is the master trustee for the fund.

Key personnel of Sears Investment Management are: David Dootson, president, Michael Norton, vice president-fixed income; and David Williams, research director.

Look for the Money Mover Scorecard in the Feb. 3 issue.

This announcement appears as a matter of record only.

October 29, 1985

$53,350,000

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Shell Oil Co.

	($ millions)
Total assets	4,979
Defined benefit	2,291
Defined contribution	2,319
401(k)	80
Other	289
Employer contributions	180
Benefit payments	325

HOUSTON — Employee benefit assets at Shell Oil Co. increased 10.2% to $4.979 billion for the year ended Sept. 30, from $4.517 billion the year before. Defined benefit assets increased 13.6% to $2.291 billion from $2.016 billion a year earlier.

Shell's employer contribution increased 12.5% to $180 million from $160 million while its benefit payments rose only 8.3% to $325 million from $300 million.

During May, Shell terminated an equity account with State Street Research and transferred those assets to its index fund managed by Wells Fargo Bank.

Shell manages $1.045 billion of its assets internally: $143 million in equities, $877 million in fixed-income and $25 million in short-term investments.

Shell has $432 million invested in an equity index fund, $69 million in GICs, $289 million in real estate equity and $12 million in mortgages.

The fund has custodial accounts with Bank of Boston, MBank Houston and Texas Commerce Bank.

The fund uses stock options.

The asset mix of the fund as of Sept. 30 was 45% stocks, 29% bonds, 4% cash, 13% real estate equity, 3% GICs, 1% mortgages and 5% mortgage-backed securities.

Equity managers: Criterion, Dodge & Cox, Equitable Life, Fayez Sarofim, Mellon Bank, Kemper Financial, Wells Fargo, First City National Bank.

Bond manager: Texas Commerce Bank.

Real estate managers: Aetna, Equitable, John Hancock, Prudential.

GICs: Aetna, Equitable, John Hancock, Metropolitan, New York Life, Prudential, Travelers.

R.S. MacIntire is plan administrator.

South Carolina Retirement System

	($ millions)
Total assets	4,980*
Defined benefit	4,980
Employer contributions	326
Benefit payments	na

*as of June 30, 1985

COLUMBIA, S.C. — The South Carolina Retirement System committed $50 million to Maggie Mae pass-through securities through MGIC Mortgage Marketing Corp. in December.

The retirement system's total assets grew 64%, to $4.98 billion on June 30 from $3.036 billion on Sept. 30, 1984, according to information from the 1986 Money Market Directory. The employer contribution rose 116%, to $326 million from $151 million in the nine-month period.

The assets are managed in-house; Jamison, Eaton & Wood provides investment advice.

The approximate asset mix as of June 30, according to MMD, was 76% bonds, 7% cash equivalents and 17% mortgage-backed securities.

Key personnel are Grady L. Patterson Jr., state treasurer, and Shakun Tahiliani, director of long-term investments.

Southwestern Bell Corp.

	($ millions)
Total assets	4,616
Defined benefit	4,250
Thrift or savings	366
Employer contributions	217
Benefit payments	193

ST. LOUIS — Southwestern Bell implemented a core manager system, hiring five equity managers at mid-year to add additional investment styles to its existing stable of managers. In late December, the fund made its first moves into international, hiring four equity managers.

Employee benefit assets increased 28.6% for the year ended Sept. 30, to $4.616 billion from $3.59 billion. There is $4.25 billion in a defined contribution plan and $366 million in savings and 401(k) plans.

Southwestern Bell has a $1.358 billion core passive index equity fund at Wells Fargo Bank. Around that core the remaining equity-oriented assets are invested with various managers following diverse styles.

New equity managers hired in 1985 were GeoCapital; Franklin Portfolio; Jennison Associates; Nicholas Applegate; Pilgrim, Baxter, Hoyt & Greig.

The company shuffled assets among some of its existing managers and converted RepublicBank Dallas, InterFirst Bank, First City Bank and Texas Commerce Bank to equity-only managers and Boatmen's National Bank to a bond manager.

The asset mix on Sept. 30 was 52.9% stocks, 27.4% bonds, 6% cash equivalents, 6.7% real estate equity, 6.6% mortgage-backed securities, 0.4% other.

The fund has $27.9 million invested in foreign equity, $11.8 million in foreign fixed income and $284.6 million in real estate equity. It has commitments of $30 million each for venture capital and oil and gas, although it has yet to invest in venture capital and has invested just $15.2 million in oil and gas.

Master trustees are RepublicBank Dallas and Bankers Trust.

Equity managers: Beutel, Goodman; Bankers Trust; First City; GeoCapital; Franklin Portfolio; InterFirst; Jennison; Mercantile Trust; Nicholas Applegate; Pilgrim, Baxter; RepublicBank Dallas; Texas Commerce; Wells Fargo.

Bond managers: Brown Brothers Harriman; Boatmen's National; Jennison; Mercantile Trust.

Key investment personnel include R.W. Wohlert, assistant treasurer-corporate finance; M.A. Devine, district manager for pension investment and administration; and L.A. Kohn, district manager-pension fund.

Sperry Corp.

	($ millions)
Total assets	2,500
Defined benefit	1,584
Thrift or savings	916
Employer contributions	na
Benefit payments	na

NEW YORK — Sperry Capital Management, the pension investment subsidiary of Sperry Corp., hired its first overseas equity managers in 1985 and expanded the global mandate of one of its domestic equity managers.

Putnam International, Mellon-Pictet International and Mercator Asset Management were brought in to run international equities. Sperry also gave the approval for Thorndike, Doran, Paine & Lewis to put up to 30% of its domestic equity account into foreign equities, up from 10% previously.

William Rechter, formerly president of Sperry Capital, was named deputy treasurer and director of investor relations. He retained responsibility for monitoring the investment management and overall functioning of the company's employee benefit operation. In December, Mr. Rechter announced he was resigning to join Cowen Asset Management.

Total employee benefit assets climbed 16% for the year through Sept. 30, to $2.5 billion from $2.154 billion in 1984.

Sperry runs $867 million of its pension assets internally: $501 million in equities, $246 million in fixed-income, $110 million in short-term instruments and $10 million in venture capital.

Some $222 million of its assets are in indexed stocks, $160 million

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in indexed bonds, $686 million in GICs, $50 million in international equities and $10 million in venture capital. Sperry uses stock options as well.

The asset mix as of Sept. 30 for its total employee benefit assets was 36% stocks, 16% bonds, 10% cash equivalents, 27% GICs, 10% annuities and 1% in liquidation and accrued contribution assets.

Balanced managers: T. Rowe Price; Thorndike, Doran; INVESCO Capital; Metropolitan Life; Travelers Insurance; Sperry Capital; Wells Fargo Bank.

Chase Manhattan Bank is master trustee.

Patricia Hennessy, senior financial analyst, has investment management responsibilities for the funds.

t

Teachers Insurance and Annuity Association — College Retirement Equities Fund

($ millions)	
Total assets	40,000
Defined contribution	40,000
Employer contributions	2,400
Benefit payments	650

NEW YORK — TIAA-CREF, the largest pension fund in the nation, grew 15.9% to $40 billion on Sept. 30 from $34.5 billion a year earlier.

Of the total, $22 billion in fixed-income investments is managed by TIAA, and $18 billion in equity investments is managed by CREF.

In 1986, the fund is planning to add a money market fund and a marked-to-market bond fund to CREF, allowing participants to switch between those new funds and the equity fund.

In December, the fund, which has a long-standing policy of encouraging U.S. companies doing business in South Africa to sign the Sullivan Principles, stepped up pressure by seeking to force 20 companies, through proxy resolutions, to sign the Sullivan Principles or close South African operations.

All of the fund's assets are managed internally.

Of the $18 billion under CREF's management, $12.5 billion is indexed.

TIAA-CREF has $1.9 billion invested in non-domestic equities and $147 million in fixed-income foreign markets.

Of the $22 billion under TIAA's management, $1.116 billion is in equity real estate and $8.921 billion is in mortgages.

The overall asset mix, as of Sept. 30, was 45% stocks, 26% bonds, 2% cash; 3% equity real estate, 23% mortgages, and 1% mortgage-backed securities.

Bankers Trust and Chase Manhattan are the custodians for CREF; Morgan Guaranty and Citibank are the custodians for TIAA.

Key personnel are James S. Martin, executive vice president, CREF investments; Henry A. Frantzen, senior vice president, CREF international; and J. Daniel Lee Jr., executive vice president, TIAA investments.

Teamsters, Central States, Southeast and Southwest Areas Pension Fund

($ millions)	
Total assets	5,775
Defined benefit	5,775
Employer contributions	667
Benefit payments	642

CHICAGO — Assets of the Teamsters, Central States fund increased 11.7% to $5.775 billion as of Sept. 30 from $5.169 billion the previous year. Fund officials attributed the rise to market performance.

Employer contributions rose 7.9% in 1985 to $667 million from $618 million the previous year. The plan paid out $642 million in benefits in 1985, up 8.3% from $593 million the previous year.

Under the direction of Morgan Stanley, its named fiduciary, the Central States fund moved from an active stock strategy to an indexed approach. It dropped active equity managers, Alliance, McCowen and MacKay-Shields, and hired Mellon Capital and Bankers Trust, assigning them a total of $1.5 billion to run in stock index funds. It also set up a $200 million special index fund with Mellon, investing passively in American multinational companies.

It scrapped its $1.03 billion in dedicated and immunized bonds and set up a $900 million indexed bond fund with an existing manager, State Street Bank.

The fund dropped Victor Palmieri as a real estate manager, turning over its assets to the two remaining realty managers. Central States' intention is to ultimately sell off its existing real estate assets, though it might, under Morgan Stanley's direction, make new real estate investments.

The fund's asset mix as of Sept. 30 was 48% stocks, 27% bonds, 10.2% cash equivalents, 0.4% real estate equity, 3.4% mortgages and 11% mortgage-backed securities.

Among its assets are $117.7 million in real estate, consisting of $23.7 million in equity and $194 million in mortgages. Its various stock indexed funds rose to $1.936 billion, including market appreciation. Plus, it had $900 million in indexed bonds.

Equity managers: BEA Associates; Equitable Life Assurance; Mellon Capital; Bankers Trust.

Fixed-income managers: Fiduciary Trust; Lincoln Income Group; Miller Anderson & Sherrerd; Morgan Guaranty; Putnam Advisory; T. Rowe Price; State Street Bank.

Real estate managers: Thomas L. Karsten; Eastdil Realty.

The Central States runs $45 million in short-term investments inhouse.

The fund's custodian is State Street Bank.

Morgan Stanley, as named fiduciary, oversees the fund.

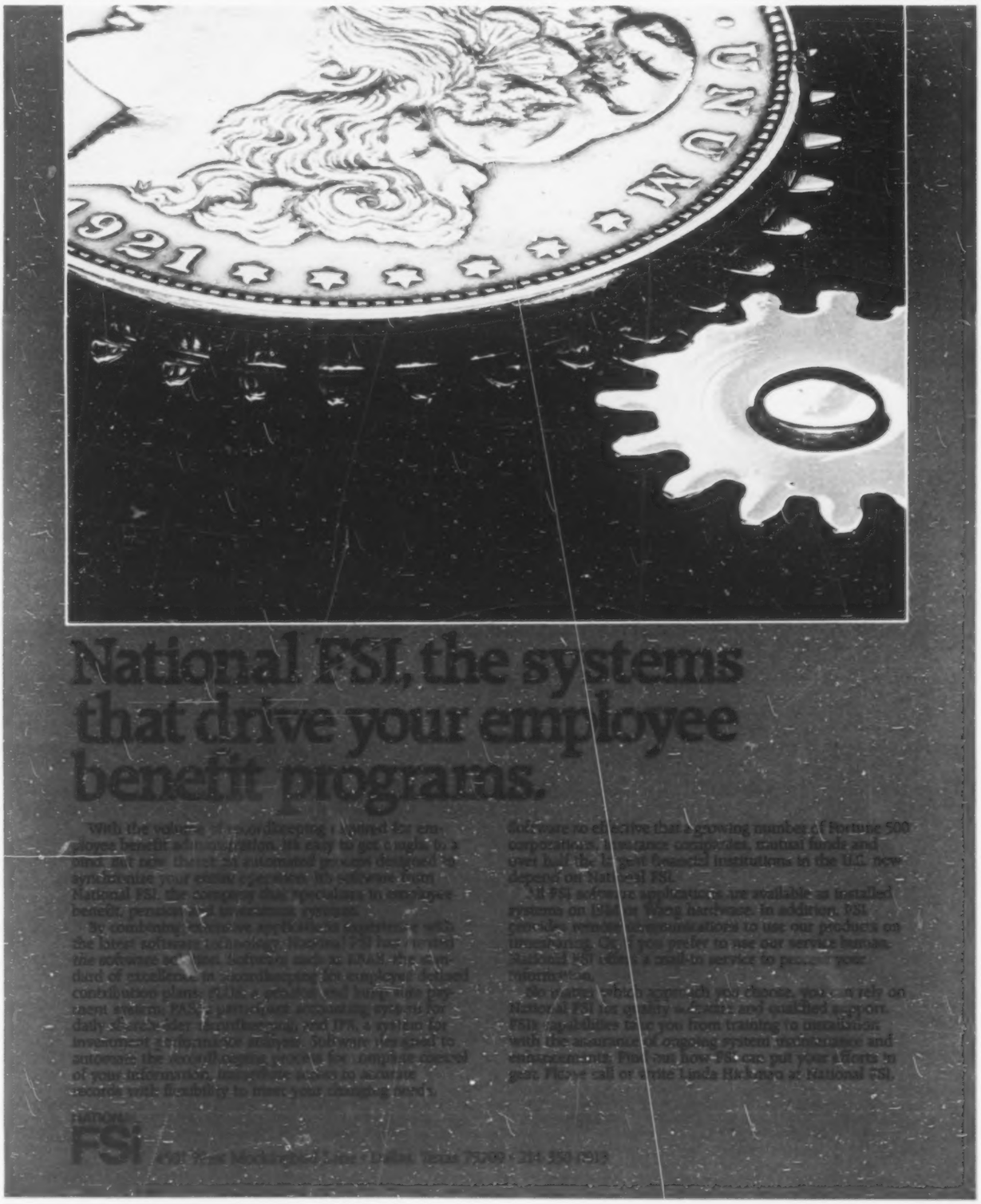
The key personnel at the Central States are George W. Lehr, executive director; Robert M. Warner, finance director; and Terrence S. Moloznik, director-asset monitoring.

Teamsters, Western Conference

($ millions)	
Total assets	5,929
Defined benefit	5,929
Employer contributions	475
Benefit payments	460

SEATTLE — The Western Conference of Teamsters Pension Trust Fund assets totaled $5.929 billion as of Sept. 30, an increase of 15.6% from the $5.129 billion reported a year earlier.

As of Sept. 30, the trust had $2.023 billion in what it calls a



fixed-dollar account with Prudential Life Insurance.

It had another $2.552 billion in a dedicated bond fund, $490 million in a non-dedicated bond fund, $14 million in a money market account, $662 million in real estate equity and $138 million in mortgages. The remainder is in cash, according to an official with the system.

All assets are managed by Prudential.

Bank of America and Prudential are the master trustees.

Key personnel overseeing investment management are Owen Bennett and Joseph Ballew, trust co-chairmen.

Tennessee Consolidated Retirement System

($ millions)

Total assets	4,249
Defined benefit	4,249
Employer contributions	175
Benefit payments	145

NASHVILLE, Tenn. — For the year ended Sept. 30, the total assets of the Tennessee Consolidated Retirement System increased 25% to $4.249 billion from $3.4 billion the previous year.

All of the fund's assets are managed internally. As of Sept. 30, the asset mix was 36% stocks, 54% bonds and 10% cash equivalents.

The fund invests $40 million in foreign equities and uses stock and bond options.

Chase Manhattan Bank is custodian for the Tennessee system.

Key personnel are Dewey Collins Jr., chief investment officer, and Rodney G. Baxter and Maurice Kellogg, portfolio managers.

Employees Retirement System of Texas

($ millions)

Total assets	3,300
Defined benefit	3,300
Employer contributions	173
Benefit payments	116

AUSTIN, Texas — The Employees Retirement System of Texas had assets of $3.3 billion on Sept. 30, 1985, an increase of 34.2% over the $2.459 billion of Aug. 31, 1984.

Employer contributions increased for the year by 14.6%, to $173 million from $151 million. Benefit payouts for 1985 rose 13.7%, to $116 million from $102 million.

All the system's assets are managed internally. INVESCO Capital is the system's equity adviser. Duff & Phelps serves as fixed-income adviser. The state treasurer is custodian of the fund.

The asset mix of the system's pension assets on Sept. 30 was 20% stocks, 69% bonds, 2% cash and 9% mortgage-backed securities.

Clayton T. Garrison is the executive director of the system. Nancy G. Goerdel is director of investments.

Texas Teacher Retirement System

($ millions)

Total assets	11,188
Defined benefit	11,188
Employer contributions	546
Benefit payments	589

AUSTIN, Texas — Total market value of employee benefit assets of the Teacher Retirement System of Texas increased 14.7% for the 12 months ended Sept. 30 to $11.188 billion from $9.753 billion. The employer contribution rose 11%, to $546 million from $492 million a year earlier. Benefit payouts rose 15%, to $589 million from $512 million.

All the system's assets are managed internally.

During 1985, the fund committed $42 million to a participating mortgage loan through L.J. Melody, raising the fund's allocation to real estate to about 6% of assets. The fund has a total of $681 million invested in mortgages.

The asset mix as of Sept. 30 was 30% stocks; 39% bonds; 22% mortgage-backed securities; 6% mortgages and 3% cash equivalents.

Bruce Hineman is executive secretary of the fund; Clark Manning is deputy executive secretary.

U

Union Carbide Corp.

($ millions)

Total assets	2,800
Defined benefit	2,800
Employer contributions	4
Benefit payments	150

DANBURY, Conn. — Union Carbide Corp.'s pension assets will shrink by possibly 90% this year to $300 million from $2.8 billion after the Pension Benefit Guaranty Corp.'s approval in late November 1985 of a spinoff/termination.

Carbide is recapturing $500 million of its $800 million in surplus pension assets and is leaving the remaining $300 million in the continuing plan.

Carbide had announced plans to terminate and recover part of the surplus last summer as part of a corporate restructuring. The battle for control of Carbide, however, leaves the status of the continuing plan in doubt as its suitor, GAF Corp., fights for the right to use the remaining pension surplus to help finance its takeover.

As of Sept. 30, Carbide had defined benefit plan assets totaling $2.8 billion, up 12% from the $2.5 billion reported a year earlier.

The fund manages all of its assets internally.

Its asset mix as of Sept. 30 was 15% stocks, 65% bonds, 15% cash equivalents, 2% annuities, 1.5% real estate equity and 1.5% mortgages.

Among its assets are $40 million each in real estate equity and mortgages. It uses stock and bond options, stock index futures and fixed-income futures.

The fund's master trustee is Manufacturers Hanover Trust Co.

Overseeing the fund are James A. O'Connell, assistant treasurer and director-pension fund investment, and W.V. Ferdinand, manager-investments.

United Air Lines Inc.

($ millions)

Total assets	3,411*
Defined benefit	2,845
Defined contribution	566
Employer contributions	na
Benefit payments	na

*as of June 30, 1985

CHICAGO — United Air Lines Inc. had $3.4 billion in employee benefit assets as of June 30, according to the 1986 Money Market Directory. That represented a 2.5% decrease from the $3.5 billion reported Sept. 30, 1984.

However, effective July 10, United terminated five pension plans with assets totaling $1.6 billion, reaping a reversion of $962.2 million.

United declined to provide post-termination asset figures.

Another termination, effective Sept. 3, of a plan with $81.5 billion in assets brought a reversion of $27 million. The Air Line Pilots Association filed a lawsuit in an attempt to block termination of the plan for pilots.

In June, when the company announced its intent to terminate, a spokesman did say assets of existing plans would stay very low until the next scheduled contribution. United terminated the plans largely to ward off hostile takeovers and to help finance expansion plans.

In announcing the termination, United officials said they had no plans to change the manager lineup. Before the termination, United did change its master trustee, replacing Harris Trust & Savings Bank with National Bank of Detroit.

As of June 30, the approximate asset mix was 57% stocks, 10% bonds, 22% general insurance accounts, 6% international investments and 5% real estate equity.

Managers: Baring International; CIGNA Asset Advisers; Jennison; LaSalle Advisors; LaSalle Street Fund; Morgan Grenfell; New England Mutual Life; Nikko; Pioneering Management; Frank Russell; Fayez Sarofim; Sit Investment; Batterymarch; Capital Guardian; Discount Corp. of New York; G.T. Capital; Lincoln Capital; Thorndike, Doran, Paine & Lewis; Trinity; Wells Fargo.

Key investment personnel are John M. Batten, vice president and treasurer, and Robert J. Gillette, director-pension investment management.

United Mine Workers of America Health & Retirement Funds

($ millions)

Total assets	3,398
Defined benefit	3,398

Funds investing overseas

($ millions)

Fund	Assets
TIAA-CREF	$2,047
United Nations Joint Staff	1,489
GTE	667
AT&T	551
General Electric Co.	460
Ameritech	430
E.I. du Pont de Nemours	404
United Technologies Corp.	332
Ford Motor Co.	330
World Bank	307
Prudential Insurance	306
Exxon Corp.	226
Allied-Signal Inc.	200
Oregon Public Employees	193
Sun Company Inc.	175
Caterpillar Tractor Co.	160
Owens-Illinois	152
Monsanto Co.	150
Xerox Corp.	144
Sears, Roebuck & Co.	129
Hawaii Employees	125
Minnesota Mining & Mfg.	121
Alaska State Systems	117
Amoco Corp.	112
Honeywell Inc.	109
FMC Corp.	100
TRW Inc.	95
Citicorp	93
Delta Air Lines Inc.	90
Florida Dept. of Admin.	88
Aluminum Co. of America	82
RCA Corp.	80
Dart & Kraft Inc.	78
American Airlines	70
American Stores	70
Hercules Inc.	70
Dow Chemical Co.	64
Florida Power & Light	62
Aetna Life & Casualty	61
Commonwealth Edison Co.	60
Travelers Insurance Co.	60
Eaton Corp.	55
U S WEST	53
ITT Corp.	53
Cooper Industries Inc.	50
Sperry Corp.	50
Inland Steel Co.	50
American Can Co.	46
Goodyear Tire & Rubber Co.	46
Tennessee Consolidated	40
Southwestern Bell Corp.	40
Presbyterian Church	38
Conoco Inc.	33
Halliburton Co.	32
Martin Marietta Corp.	30
Philip Morris	30
Phillips Petroleum Co.	30
Unocal Corp.	28
Bethlehem Steel Corp.	26
Deere & Co.	26
International Paper	25
Illinois Teachers System	22
Ashland Oil	20
Episcopal Church	20
Armco Inc.	20
Southern California Edison	19
Eli Lilly & Co.	17
Pan American World Airways Inc.	15
Trans World Airlines Inc.	15
CIGNA Corp.	15
PPG Industries Inc.	14
Pennsylvania State Employees	13
R.J. Reynolds	12
General Foods Corp.	9
Chicago Municipal Employees	6
KMI Continental	6
Detroit Retirement Systems	2
United Air Lines	NA
Total	**$11,665**

BABSON
FIXED INCOME
ADVISORS,
Inc.

David L. Lindsay
President

An affiliate of
David L. Babson & Co., Inc.
Boston, Massachusetts

Employer contributions	525
Benefit payments	405

WASHINGTON — Key personnel shifts occurred in the United Mine Workers of America Health & Retirement Funds during 1985.

Jerry N. Clark was named executive director, replacing Herbert L. Dyer. Charles S. Stephens, formerly assistant controller and corporate pension officer at Celanese, was appointed director of investments, succeeding Linda R. Taylor, who had moved to the International Union of Operating Engineers pension fund.

In addition, the UMWA 1974 plan trustees are working to spin off a new plan for construction workers covered by the union in spring 1986. The new plan is expected to start with between $75 million and $80 million in assets.

During the 12 months ended Sept. 30, the fund dropped bond managers Argus, CM&M Asset Management and Degnan & Gillespie, and equity manager Forstmann-Leff. In addition, it established an internally managed indexed bond portfolio; the fund had $170 million in assets in the portfolio as of Sept. 30. It also manages $120 million in short-term investments in-house.

Equity managers: Batterymarch; Torray Clark; Pioneering; Warburg, Pincus; Argus; Thompson, Siegel & Walmsley; Denver Investment Advisors; Tower Capital.

Bond managers: Criterion; Lehman; Loomis, Sayles; Starbuck, Taylor, Tisdale & Williams; T. Rowe Price; J.P. Morgan.

Real estate managers: Equitable; Goldman, Sachs; Metropolitan; Prudential; RREEF; State Street; TCW Realty.

Cash manager: Bankers Trust.

As of Sept. 30, the UMWA had $3.398 billion in retirement plan assets, up 22.1% from the Sept. 30, 1984, level of $2.784 billion.

The asset mix was 31% stocks, 35% bonds, 23% cash equivalents, 6% real estate equity and 5% mortgage-backed securities.

The fund also maintains $1.079 billion in a hybrid dedicated immunized bond portfolio established in 1982. It has committed $236 million to real estate.

The fund uses fixed-income futures.

Boston Safe Deposit & Trust is the custodian.

Overseeing the fund are Mr. Clark, Mr. Stephens and Barnard A. Buscemi, assistant director for investments.

United Nations Joint Staff Pension Fund

($ millions)	
Total assets	4,354
Defined benefit	4,354
Employer contributions	373
Benefit payments	366

NEW YORK — The United Nations Joint Staff Pension Fund increased 20.6% in the year ended Sept. 30, to $4.354 billion from $3.61 billion a year earlier.

Employer contributions to the fund in 1985 dipped slightly to $373 million in 1985, from $380 in 1986. Benefit payments increased 14.3%, to $366 million from $320 million in 1984.

The fund is internally managed; Fiduciary Trust Co. of New York provides investment advice. Citicorp had been an adviser to the fund, but that relationship was severed in 1985.

Last summer, the fund sold off its last holdings of South African-related securities, ending a 10-year divestiture process. The total amount divested was not given.

Just less than $1.5 billion was invested internationally: $794 million in equities; $647 million in fixed income; and $48 million in other securities. The fund also has $388 million in real estate equity.

As of Sept. 30, the asset mix was 47.9% equities, 34.5% fixed income, 8.7% short-term cash equivalents and 8.9% real estate equity.

Fiduciary Trust is custodian.

Key investment personnel are Timothy P. Prince, chief-investment management section, and Henry Ouma, senior investment officer.

United Technologies Corp.

($ millions)	
Total assets	5,500
Defined benefit	4,050
Thrift or savings	1,100
Other	35
Employer contributions	221
Benefit payments	na

HARTFORD, Conn. — Employee benefit assets at United Technologies Corp. increased 18.7% to $5.5 billion as of Sept. 30 from the $4.631 billion estimated by *Pensions & Investment Age* a year earlier. Defined benefit assets grew only 8.4%, to $4.05 billion as of Sept. 30 from the $3.735 billion estimated as of Sept. 30, 1984.

Employer contributions to the fund for 1985 totaled $221 million, a 13.3% increase from 1984's $195 million.

This past summer, Frances Primbly was hired as director-pension investments in charge of fixed income for the fund. She was director of trust investments for Schering-Plough Corp., Madison, N.J.

The fund completed the restructuring of its U.S. Master Trust plan, by roughly doubling fixed-income exposure and hiring 10 fixed-income managers, by dropping 10 of its 15 equity managers and adding 13 new ones. The new equity portfolio's style is 30% each value oriented and large-cap and 20% each sector rotation and stock pickers.

Equity managers: Value Line; Wright Investors; Nicholas Applegate; Brignoli, Curley & Roberts; Citibank; Conn. National Bank; CIGNA; Wertheim Asset Management; Jennison Associates; Lehman Asset; TCW; Sanford C. Bernstein; Bankers Trust; HLM; Hellman Jordan; Trinity; Management Asset; Olympic.

Bond managers: Morgan Stanley; Scudder, Stevens & Clark; Miller Anderson Sherrerd; Jennison Associates; Loomis, Sayles; W R. Huff; Delaware Investment Advisors; MacKay-Shields; Neuberger & Berman; Payden & Rygel.

Real estate managers: Citibank; CIGNA; Aetna; Prudential; Eastdil; InterFirst; Lehndorff Babson.

International managers: ABD International; Capital Guardian; Batterymarch; State Street; Schroder Capital; Prudential.

Venture capital: Bridge Capital; Butler Capital; TCW; Morgan Holland; Charles River; Crossroads Advanced Technology; Venture-Tech; Narragansett.

The fund has $175 million in indexed stocks and $30 million in a dedicated or immunized bond portfolio. Another $332 million is in international equities. As part of the overall equity restructuring, three of the 13 equity managers hired were international managers, and one was hired to manage an international index fund.

The fund has $210 million in real estate equity, $50 million in mortgages, $35 million in venture capital and $10 million in oil and gas.

The asset mix as of Sept. 30 was 42% equities, 11% income, 4% cash equivalents, 5% real estate, 34% annuities, 1% mortgages and 3% in private placements and venture capital.

The fund uses stock options and stock index futures.

Citibank is custodian.

Key investment personnel are Beverly L. Hamilton, vice president pension investment and investor relations; and Carl W. Strayer, Ms. Crimbly and Edward Cheney, directors-pension investments.

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New York, New York 10112. (212) 621-2858

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U.S. Steel and Carnegie Pension Fund

	($ millions)
Total assets	8,000
Defined benefit	7,500
Thrift or savings	500
Employer contributions	na
Benefit payments	na

NEW YORK — Gary Glynn replaced Graham Harrison this year as president of the U.S. Steel and Carnegie Pension Fund. After 30 years with the fund, Mr. Harrison left to become vice president and chief investment officer of the Howard Hughes Medical Institute in Bethesda, Md.

The U.S. Steel fund's assets increased 16.8% as of Sept. 30, to $8 billion from $6.85 billion a year earlier. All assets are managed internally.

The breakout between defined benefit and thrift or savings assets is an estimate. The estimated $500 million in thrift assets includes those of the company's 401(k) plan.

Fund officials declined to give an asset mix for the plan. But data compiled by CDA Technologies Inc. put the Sept. 30 value of equity assets at $4.3 billion, or about 54%. The fund is also believed to have more than $250 million in international investments.

In addition to Mr. Glynn, John Van Deusen, senior vice president, and Peter Lincoln, vice-president-investments, have investment responsibilities for the fund.

U S WEST Inc.

	($ millions)
Total assets	5,675
Defined benefit	4,964
Defined contribution	711
Employer contributions	204
Benefit payments	202

ENGLEWOOD, Colo. — The U S WEST Inc. pension plan went through a partial restructuring during 1985, hiring its first international managers and adding seven equity, three bond and three real estate managers.

The new international managers are Capital Guardian and Putnam International.

The added equity managers were Fayez Sarofim; Mellon Capital; Denver Investment Advisors; PRIMECAP; Brignoli, Curley & Roberts; Trinity Investment; and Concord Capital.

Bond managers hired were NISA, First Interstate and Wells Fargo, and the real estate managers were Equitable, Copley and Security Capital.

Dropped from the equity rolls were Dean Witter, Clarens and First Asset Management, which also was dropped as venture capital manager.

Total assets of the fund as of Sept. 30 were $5.7 billion, a 92% increase from the $2.9 billion of a year earlier. The dramatic increase was due primarily to the final transfer of pension assets following the divestiture of American Telephone & Telegraph Co.

Contributions to employee benefit plans for 1985 totaled $204 million. Benefit payments totaled $202 million, an 11.8% decrease from 1984.

On Sept. 30, the asset mix was 56% stocks, 33% bonds, 4% real estate equity and 7% other.

Among its assets are $864 million in indexed stocks, $345 million in indexed bonds, $1.054 billion in dedicated or immunized bond funds, $53 million in foreign equities, $47 million in venture capital, $1 million in oil and gas and $215 million in real estate equity.

Equity managers: Capital Guardian; David J. Greene; United Capital Management; Wells Fargo; First Manhattan; Fayez Sarofim; Mellon Capital; Denver Investment; PRIMECAP; Brignoli; Trinity; Concord.

Bond managers: NISA; Jennison; Wells Fargo; First Interstate.

Real estate managers: Equitable; Copley; Security Capital; Jones Lang Wootton; TCW Realty; LaSalle Fund II.

Venture capital managers: Citibank; Denver Investment.

International managers: Capital Guardian; Putnam.

Oil and gas manager: Citibank.

The company has master trustee accounts with Boston Safe and Bankers Trust.

James Biundo is director-trust investment management.

Utah State Retirement Fund

	($ millions)
Total assets	2,160
Defined benefit	2,160
Employer contributions	150
Benefit payments	58

SALT LAKE CITY — The Utah State Retirement Fund increased its total assets by 20.5% in the year ended Sept. 30, to $2.16 billion from $1.793 billion.

Contributions of $150 million in 1985 are employer and employee

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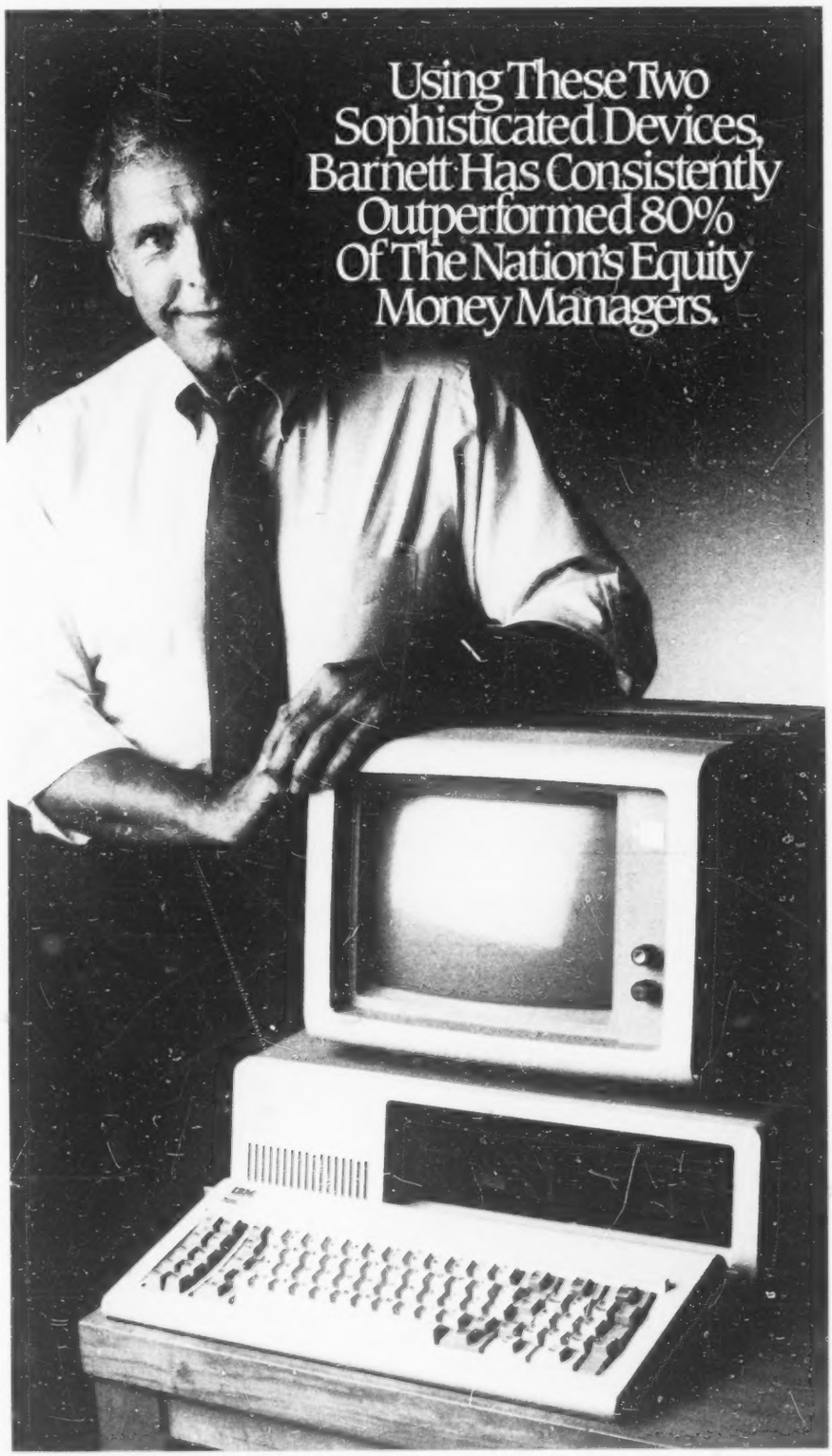

Barnett Bank

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*As measured by SEI Corp. – Funds Evaluation Services.

Funds using futures

Fixed income

Alaska State Systems
American Stores Co.
Amoco Corp.
Ashland Oil
Bechtel Power Corp.
Bell Atlantic Corp.
Caterpillar Tractor Co.
Chevron Corp.
Chrysler Corp.
E.I. du Pont de Nemours
Episcopal Church
Ford Motor Co.
General Elecric Co.
Halliburton Co.
Hercules Inc.
Honeywell Inc.
IBM Corp.
Illinois State Universities
Illinois Teachers
International Paper
Kansas Public Employees
Minnesota Mining & Mfg.
Monsanto Co.
NYNEX Corp.
Ohio State Teachers
Oregon Public Employees
Owens-Illinois Inc.
Philip Morris
Presbyterian Church
RCA Corp.
R.J. Reynolds
Southern California Edison
Teamsters, Western Conference
Texas Instruments Inc.
Travelers Insurance Co.
Union Carbide Corp.
United Mine Workers
Westinghouse Electric Corp.

Stock index

Aluminum Co. of America
American Can Co.
American Stores Co.
Armco Inc.
Bechtel Power Corp.
Bell Atlantic Corp.
Caterpillar Tractor Co.
Chrysler Corp.
Citicorp
Commonwealth Edison Co.
Dart & Kraft Inc.
Dow Chemical Co.
E.I. du Pont de Nemours
Eaton Corp.
Episcopal Church
Exxon Corp.
Florida Dept. of Admin.
GTE Corp.
General Electric Co.
General Foods Corp.
Hercules Inc.
Honeywell Inc.
IBM Corp.
Illinois Teachers
International Paper
Kansas Public Employees
K mart Corp.
Minnesota Mining & Mfg.
Monsanto Co.
Intl. Union of Oper. Eng.
Oregon Public Employees
Owens-Illinois Inc.
Pennsylvania Public School
Philip Morris
R.J. Reynolds
RCA Corp.
Sears, Roebuck & Co.
Southern California Edison
Tenneco Inc.
Texas Instruments Inc.
Trans World Airlines Inc.
Union Carbide Corp.
United Technologies
Westinghouse Electric Corp.
Xerox Corp.

contributions.

About 70% — or $1.53 billion — of the fund's assets are managed internally. Of that, $347 million is in equity; $268 million, short-term investments; $869 million, fixed income; and $47 million, real estate.

It has increased assets in indexed stocks 92% to $260 million. It has $15 million in venture capital, $139 in real estate equity and $22 million in mortgages. The fund also uses stock options.

Outside money managers provide investment advice only.

Equity advisers: Atalanta Sosnoff Capital Consultants; Value Line; Smoot Miller & Cheney; Wasatch Advisors.

Real estate adviser: F.I.A. Associates.

Chemical Bank is the fund's custodian.

The fund's asset mix as of Sept. 30 was 40% stocks, 35% bonds, 12% cash equivalents, 6% real estate equity, 1% mortgages, 6% mortgage-backed securities.

Key personnel are W. Dan Smith, investment officer, and Richard Cherry, assistant investment officer.

V

Virginia Supplemental Retirement System

	($ millions)
Total assets	4,509
Defined benefit	4,509
Employer contributions	650
Benefit payments	330

RICHMOND, Va. — In 1985, the Virginia Supplemental Retirement System started a development fund, which operates like a "farm team," with specialty managers trying to get extra value. Nine managers were hired to run about $200 million.

The nine are Brignoli, Curley & Roberts; Corinthian Capital; Hellman, Jordan; GAMCO Investors; Pacific Financial; Nicolas-Applegate; Schafer Capital; Donald Smith & Co.; TCW Realty.

Timothy R. Barron was named director of investments during the year.

As of Sept. 30, assets grew 25% to $4.509 billion from the $3.595 billion reported a year earlier.

The retirement system runs $1.822 billion internally: $284 million in equities; $266 million in short-term investments; and $1.272 billion in fixed income. During the year, it added two more in-house portfolios, a defensive income portfolio and an index portfolio.

Other equity moves during the year were the termination of MPT Associates and MacKay-Shields Financial Management, and the hiring of Concord Capital Management, Jundt Capen Associates and McKenzie Walker Investment Management.

Equity managers: Batterymarch; Brignoli, Curley & Roberts; Concord; Corinthian; Delaware Investment; GAMCO; Hellman, Jordan; Jundt Capen; IDS Advisory; Lincoln Capital; McKenzie Walker; Mellon; Nicholas-Applegate; Pacific Financial; Putnam Advisory; Schafer Capital; Donald Smith & Co.; Wells Fargo Investment Advisors.

Fixed-income manager: Massachusetts Financial Services.

Real estate managers: Equitable; LaSalle; Prudential; RREEF; TCW.

The fund has $891 million in indexed stocks, an increase of 84% due to a shifting of assets internally, and $227 million in equity real estate.

The asset mix as of Sept. 30 was 55% equity, 33% bonds, 7% cash equivalents and 5% equity real estate. Sovran Bank is custodian.

Key personnel are Mr. Barron; Gary Allen, director of internal asset management; and Thomas Hassard, real estate investment officer.

W

Washington State Investment Board

	($ millions)
Total assets	6,749
Defined benefit	6,749
Employer contributions	550
Benefit payments	na

OLYMPIA, Wash. — The Washington State Board of Investment's pension assets increased 25% to $6.749 billion in the 12 months ended Sept. 30 from $5.4 billion.

Employer contributions increased 10% to $550 million during the year from $500 million.

The fund has $1.594 billion in indexed stocks, $198 million in indexed bonds, $100 million invested (and $202 million committed) in venture capital, $260 million in leveraged buy-outs, $123 million in real estate equity and $350 million in mortgages.

It manages $3.271 billion in-house: $2.611 billion in fixed-income (including mortgages) and $660 million in short-term investments.

As of Sept. 30, the asset mix was 44.5% stocks, 33.7% bonds, 9.7% cash equivalents, 1.8% real estate equity, 5.3% in venture capital and leveraged buy-outs and 5% in mortgages.

Equity managers: Mellon Capital; Wells Fargo; Hotchkis & Wiley; Batterymarch; Columbia Management; Schafer Capital; Torray Clark; United Capital.

Real estate managers: Equitable; Smith Barney; Pacific Mutual; RREEF; Copley.

The fund no longer uses Prudential for real estate.

Chase Manhattan is custodian.

John Hitchman is executive director; David Weig is deputy director.

Westinghouse Electric Corp.

	($ millions)
Total assets	4,250
Defined benefit	3,400
Thrift or savings	750
401(k)	100
Employer contributions	155
Benefit payments	370

PITTSBURGH — During 1985, Westinghouse Electric Corp. hired Brignoli, Curley & Roberts for equity management and added four bond managers.

Employee benefit assets at Westinghouse increased 16.4% to $4.25 billion, as of Sept. 30 from $3.65 billion a year earlier.

Defined benefit assets rose 9.7%, to $3.4 billion from $3.1 billion.

Employer contributions increased 6.9% to $155 million in 1985 from $145 million a year earlier. Benefit payments grew 23.3% to $370 million from $300 million.

About 60%, or $2.535 billion of the fund is managed through Westinghouse's investment management subsidiary, Westinghouse Pension Investments. Of that, $540 million was in equities, $1.555 billion was in fixed-income securities and $440 million was in short-term investments.

The fund uses stock and bond options and stock index and fixed-income futures as hedging devices.

The fund has $25 million in venture capital, $515 million in real estate equity and $125 million in mortgages.

Equity managers: Provident Capital; Pittsburgh National Bank; Brignoli, Curley & Roberts; Stralem; Manufacturers Hanover.

Bond managers: Pioneering Management; Putnam Advisors; MacKay-Shields; Equitable Life.

IN 10 WORDS OR LESS ...

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Real estate managers: Equitable Life, Mellon Real Estate, First Chicago Investment Advisors, Citibank.

The asset mix as of Sept. 30 was 23% stocks, 43% bonds, 15% cash equivalents, 15% real estate equity and 4% mortgages.

Mellon Bank is custodian.

Key investment personnel are R.V. Billings, vice president pension investments and investor relations; T.A. Gudinas, director pension funds; and T.G. Scannell, assistant director pension funds.

Wisconsin State Board of Investment

	($ millions)
Total assets	10,800
Defined benefit	9,200
Defined contribution	1,600
Employer contributions	230
Benefit payments	275

MADISON, Wis. — The Wisconsin State Board of Investment's assets grew 24.3% to $10.8 billion as of Sept. 30 from $8.692 billion a year earlier.

About $1.6 billion of the assets are invested in a manner that has features of a defined contribution plan, in that participants can designate a portion of their contributions to a common stock fund in which they share the investment risk.

Wisconsin began offering employees this option several years ago, but had not reported it as a defined contribution plan before.

However, the fund has stopped giving new participants the option, so it eventually will be phased out.

Employer contributions increased 9.5% to $230 million from $210 million.

Employees also contributed $230 million.

Benefit payments decreased 8.3% to $275 million from $300 million a year ago.

All the assets are managed in-house. The fund has $184 million committed to real estate equity. As of Sept. 30, the approximate asset mix was 40% stocks, 53% bonds, 2.5% mortgage-backed securities, 2.5% cash equivalents and 2% real estate.

Later in the year, the investment board made its first venture capital investments from cash flow, after receiving legislative approval to do so.

Morgan Guaranty is custodian.

Kenneth Codlin is executive director of the fund.

Second 100

The following is an alphabetical listing of the bottom 100 pension funds sponsors as determined by *Pensions & Investment Age* questionnaires.

Aetna Life & Casualty

	($ millions)
Total assets	1,587
Defined benefit	1,086
401(k)	485
Other	16
Employer contributions	29
Benefit payments	33
In-house assets:	
Equities	495
Fixed income	365
Short term	2
Other	224
Passive investments:	
Invested in GICs	53
International investments:	
Equity	61
Alternative investments:	
Real estate equity	72
Mortgages	16
Asset mix:	
Stocks	51.2%
Bonds	6.9%
Cash equivalents	0.2%
Real estate equity	6.6%
Mortgages	1.5%
GICs	4.9%
Annuities	28.7%
Dedicated bond funds	200
International investments:	
Equity	46
Alternative investments:	
Real estate equity	55
Asset mix:	
Stocks	47%
Bonds	27%
Cash equivalents	19%
Real estate equity	7%

Aluminum Co. of America

	($ millions)
Total assets	2,051
Defined benefit	1,790
Thrift or savings	261
Employer contributions	160
Benefit payments	155
Passive investments:	
Equity indexing	424
Invested in GICs	34
International investments:	
Equity	61
Fixed income	21
Alternative investments:	
Venture capital	35
Real estate equity	106
Asset mix:	
Stocks	57%
Bonds	22%
Cash equivalents	11%
Real estate equity	6%
Mortgage-backed securities	2%
GICs	2%

American Can Co.

	($ millions)
Total assets	1,014
Defined benefit	904
Profit-sharing	48
Thrift or savings	62
Employer contributions	76
Benefit payments	100
In-house assets:	
Fixed income	200
Passive investments:	

American Stores Co.

	($ millions)
Total assets	1,105
Defined benefit	218
Profit-sharing	601
Thrift or savings	86
401(k)	200
Employer contributions	na
Benefit payments	na
International investments:	
Equity	70
Asset mix:	
Stocks	60%
Bonds	40%

Arkansas Teacher Retirement System

	($ millions)
Total assets	1,134
Defined benefit	1,134
Employer contributions	75
Benefit payments	58
In-house assets:	
Short term	68
Alternative investments:	

Funds investing in GICs

($ millions)

Fund	Assets
Ford Motor Co.	$1,100
Eastman Kodak	783
Procter & Gamble	730
Sperry Corp.	586
Southern Baptist Church	600
N.Y.C. Retirement Systems	572
Chevron Corp.	456
Travelers Insurance Co.	420
Getty Oil	367
Detroit Retirement Systems	331
Monsanto Co.	300
United Methodist	300
Dresser Industries	280
Trans World Airlines Inc.	270
General Foods Corp.	260
General Electric Co.	247
Presbyterian Church	232
Dart & Kraft Inc.	230
K mart Corp.	203
General Dynamics Corp.	200
RCA Corp.	200
Halliburton Co.	194
Boilermakers & Blacksmiths	183
McDermott International Inc.	174
Intl. Union of Oper. Eng.	155
Phillips Petroleum Co.	152
Bakery & Confectionery	147
Hawaii Employees Systems	142
Hercules Inc.	141
Ashland Oil	122
ITT Corp.	118
Delta Air Lines Inc.	115
Southern California Edison	115
Inland Steel Co.	106
Colorado Public Employees	103
Cooper Industries Inc.	100
Honeywell Inc.	96
Tennessee Valley Authority	92
Martin Marietta Corp.	87
Sun Co. Inc.	78
Connecticut Trust Funds	74
Shell Oil Co.	69
Bethlehem Steel Corp.	57
Texaco Inc.	55
FMC Corp.	54
Aetna Life & Casualty	53
International Paper	50
Southern Co. Services Inc.	50
Conoco Inc.	46
Baltimore Employees	40
Aluminum Co. of America	34
Pacific Gas & Electric Co.	33
Armco Inc.	31
International Harvester Co.	25
Florida Power & Light	22
Alabama Retirement Systems	20
American Airlines	20
Indiana State Teachers	20
Mass. Employees & Teachers	20
Illinois State Universities	16
North American Philips	10
PPG Industries Inc.	10
Total	**$11,996**

THERE'S NO MORE EASY MONEY IN REAL ESTATE

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Today's U.S. real estate investment marketplace is no longer driven by the inflation and supply/demand pressures which pushed values up along a broad front and made it look as though almost anybody could be a winner.

Real estate continues to be a promising and vital part of a balanced institutional investment portfolio, but it must be approached with appropriate expectations.

The greatest opportunities lie in the creation of additional value through active, intensive management and development of well-selected properties that are underperforming.

This "creation of value" approach, which drives performance independent of inflation, is the basic philosophy of Schroder Real Estate Associates in our real estate advisory services for pension fund clients and in our other specialized investment vehicles. We emphasize underperforming retail, office, and light industrial properties in built-up locations that can respond to our direct, hands-on style of active ownership—refurbishment, expansion, remerchandising and other value-enhancing strategies.

Schroder Real Estate has approximately $1,000,000,000 in equity real estate under management for more than 100 major pension funds, institutions and corporations, either as direct investors or as participants in commingled real estate vehicles. We have been advising on real estate investments since 1972 and managing real estate assets for pension funds since 1975. We are an acknowledged leader in the expansion and refurbishment of shopping centers and office buildings throughout the United States. More than 100 staff professionals in our various U.S. offices include an extensive in-house property and construction management and leasing capability devoted to value creation in all our investments.

SCHRODER
REAL ESTATE ASSOCIATES
457 Madison Avenue
New York, NY 10022
(212) 486-9800

Call John E. Emmanuel, senior vice president

Mortgages	38
Asset mix:	
Stocks	40.6%
Bonds	46.6%
Cash equivalents	7.2%
Mortgages	3.6%
Mortgage-backed securities	2%

Armco Inc.

	($ millions)
Total assets	1,529
Defined benefit	1,343
Profit-sharing	17
Thrift or savings	165
Other	4
Employer contributions	106
Benefit payments	160
In-house assets:	
Fixed income	394
Short term	79
Other	89
Passive investments:	
Equity indexing	89
Dedicated bond funds	394
Invested in GICs	31
International investments:	
Equity	20
Alternative investments:	
Venture capital	19
Real estate equity	196
Asset mix:	
Stocks	37.6%
Bonds	29.4%
Cash equivalents	5.9%
Real estate equity	14.6%
GICs	2.3%
Other	10.2%

Ashland Oil Inc.

	($ millions)
Total assets	922
Defined benefit	636
Profit-sharing	2
Thrift or savings	268
Other	16
Employer contributions	12
Benefit payments	18
In-house assets:	
Fixed income	56
Passive investments:	
Invested in GICs	122
International investments:	
Equity	15
Fixed income	5
Alternative investments:	
Real estate equity	13
Mortgages	21
Asset mix:	
Stocks	33%
Bonds	20%
Cash equivalents	15%
Real estate equity	2%
Mortgages	3%
Mortgage-backed securities	3%
GICs	19%
Annuities	5%

Bakery & Confectionery Union Pension Fund

	($ millions)
Total assets	1,317
Defined benefit	1,317
Employer contributions	134
Benefit payments	110
Passive investments:	
Invested in GICs	147
Asset mix:	
Stocks	34.5%
Bonds	39%
Cash equivalents	8.5%
Mortgages	5%
GICs	9%
Other	4%

Baltimore Employees' Retirement System

	($ millions)
Total assets	920
Defined benefit	920
Employer contributions	27
Benefit payments	45
Passive investments:	
Invested in GICs	40
Asset mix:	
Stocks	45%
Bonds	42%
Cash equivalents	8.1%
Mortgages	0.5%
GICs	4.4%

Bechtel Power Corp.

	($ millions)
Total assets	1,100
Defined contribution	1,100
Employer contributions	na
Benefit payments	na
In-house assets:	
Fixed income	50
Short term	125
Asset mix:	na

Boilermakers, Blacksmiths National Pension Trust

	($ millions)
Total assets	1,604
Defined benefit	1,604
Employer contributions	58
Benefit payments	65
In-house assets:	
Short term	14
Passive investments:	
Dedicated bond funds	90
Invested in GICs	183
Alternative investments:	
Real estate equity	177
Mortgages	3
Asset mix:	
Stocks	36.8%
Bonds	32.8%
Cash equivalents	7.8%
Real estate equity	11%
Mortgages	0.2%
GICs	11.4%

Chicago Municipal Employees' Annuity and Benefit Funds

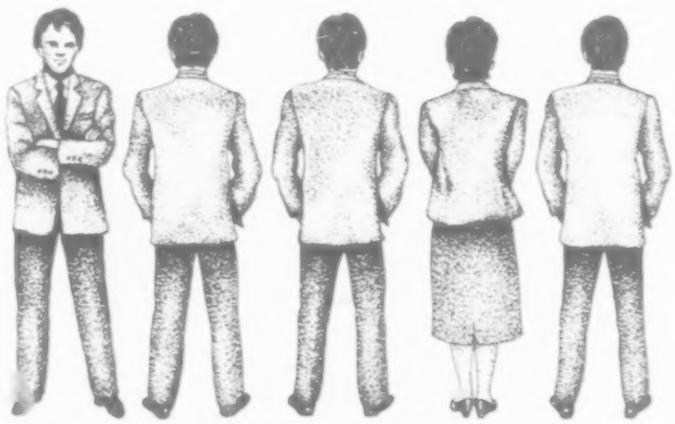
	($ millions)
Total assets	1,500
Defined benefit	na
Defined contribution	na
Employer contributions	70
Benefit payments	89
Passive investments:	
Equity indexing	29
Dedicated/immunized	370
International investments:	
Fixed income	6
Alternative investments:	
Venture capital	35
Real estate equity	50
Mortgages	110
Asset mix:	
Stocks	31%
Bonds	30%
Cash equivalents	8%
Real estate equity	4%
Mortgages	11%
Mortgage-backed securities	11%
Annuities	3%
Venture capital	2%

CIGNA Corp.

	($ millions)
Total assets	1,002
Defined benefit	762
Profit-sharing	90
401(k)	150
Employer contributions	55
Benefit payments	10
In-house assets:	
Equities	457
Fixed income	304
Short term	0.3
Other	0.7
International investments:	
Equity	9
Fixed income	6
Alternative investments:	
Real estate equity	30.4
Mortgages	76
Asset mix:	
Stocks	56%
Bonds	20%
Real estate equity	4%
Mortgages	10%
Private placements	10%

Citicorp

	($ millions)
Total assets	1,432



Four Out of Five Institutional Fund Managers Are Avoiding Something

Or perhaps overlooking it. Mortgage-backed securities constitute the most attractive and rapidly growing sector within the fixed-income area. Given current trends, they have the potential eventually to become the largest portion of the entire debt market. Yet, roughly four out of five fixed-income fund managers have avoided this compelling segment altogether.

Are mortgage-backed products exactly right for your portfolio? Without knowing you and your objectives, it's difficult to say. But, despite the perceived complexity surrounding mortgage-backed securities, they have been the best performing segment of the high-quality, high-liquidity debt market over the last ten years. Their strong quality, yield, and liquidity characteristics can make them an important component of many portfolios.

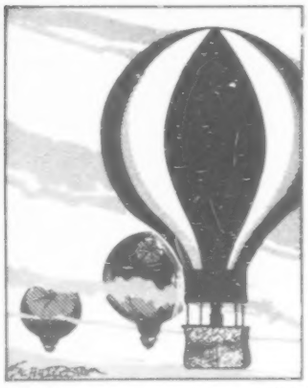
First Boston Asset Management is ready to share an in-depth assessment of the suitability of mortgage-backed securities for particular clients. Our small group of successful investment professionals can draw on uncommon experience in the mortgage-backed area, and is in a position to offer superior analytical perspectives.

Providing valuable viewpoints on appropriate product opportunities is only one of the many ideas helping First Boston Asset Management create a new standard of excellence in investment management. We urge you to call or write Mr. Michael Holland, President, to hear some of the others. Or, send for our introductory brochure.

First Boston Asset Management Corporation, 12 East 49th Street, New York, New York 10017, (212) 909-4525

First Boston
Asset Management Corporation

Profiles



Defined benefit	1,060
Defined contribution	372
Employer contributions	8
Benefit payments	30
In-house assets:	
Equities	1,002
Fixed income	272
Short term	43
Other	115
Passive investments:	
Equity indexing	20
International investments:	
Equity	73
Fixed income	20
Alternative investments:	
Venture capital	5
Real estate equity	23
Mortgages	60
Asset mix:	
Stocks	70%
Bonds	19%
Cash equivalents	3%
Real estate equity	2%
Mortgages	6%

Commonwealth Edison

	($ millions)
Total assets	1,401
Defined benefit	1,401
Employer contributions	na
Benefit payments	na
In-house assets:	
Equities	638
Fixed income	598
Short term	93
International investments:	
Equity	44
Fixed income	16
Alternative investments:	
Oil and gas	0.5
Asset mix:	
Stocks	48%
Bonds	45%
Cash equivalents	6.5%
Other	0.5%

Conoco Inc.

	($ millions)
Total assets	1,729
Defined benefit	523
Thrift or savings	1,101
Other	105
Employer contributions	82
Benefit payments	300
Passive investments:	
Invested in GICs	46
International investments:	
Equity	31
Fixed income	2
Alternative investments:	
Venture capital	29
Real estate equity	65
Mortgages	18
Asset mix:	
Stocks	64%
Bonds	11%
Cash equivalents	1%
Real estate equity	12%
Mortgages	1%
Mortgage-backed securities	2%
GICs	9%

Consolidated Edison of New York

	($ millions)
Total assets	1,735
Defined benefit	1,635
401(k)	100
Employer contributions	na
Benefit payments	na
Asset mix	na

Cooper Industries Inc.

	($ millions)
Total assets	1,150
Defined benifits	800
Defined contribution	335
401(k)	15
Employer contributions	na
Benefit payments	na
Passive investments:	
Equity indexing	200
Dedicated bond funds	100
Invested in GICs	100
International investments:	
Equity	50
Alternative investments:	
Real estate equity	50
Asset mix:	
Stocks	35%
Bonds	20%
Cash equivalents	25%
Real estate equity	5%
GICs	10%
Annuities	5%

Dart & Kraft Inc.

	($ millions)
Total assets	1,552
Defined benefit	1,114
Defined contribution	438
Employer contributions	28
Benefit payments	61
In-house assets:	
Equities	31
Fixed income	8
Short term	50
Passive investments:	
Dedicated bond funds	47
Invested in IPGs	230
International investments:	
Equity	71
Fixed income	1
Other	7
Alternative investments:	
Venture capital	13
Asset mix:	
Stocks	44.2%
Bonds	12.9%
Cash equivalents	22.2%
IPGs	20.7%

Deere & Co.

	($ millions)
Total assets	1,844
Defined benefit	1,809
401(k)	35
Employer contributions	102
Benefit payments	140
In-house assets:	
Equities	1,050
Fixed income	250
Passive investments:	
Equity indexing	800
Fixed-income indexing	250
International investments:	
Equity	26
Alternative investments:	
Venture capital	17
Real estate equity	19
Asset mix:	
Stocks	75%
Bonds	25%

Dow Chemical Co.

	($ millions)
Total assets	1,620
Defined benefit	1,400
Thrift or savings	220
Employer contributions	110
Benefit payments	110
In-house assets:	
Equities	285
Fixed income	132
Short term	42
Other	71
Passive investments:	
Equity indexing	63
Dedicated bond funds	90
International investments:	
Equity	64
Alternative investments:	
Venture capital	20
Asset mix:	
Stocks	53%
Bonds	34%
Real estate equity	13%

Dresser Industries Inc.

	($ millions)
Total assets	900
Defined benefit	880
Thrift or savings	10
401(k)	10
Employer contributions	25
Benefit payments	24
In-house assets:	
Equities	40
Fixed income	26
Short term	4
Other	280

In less than three years the Mellon team has been chosen as real estate investment adviser for more than $850 million in real estate investments.

What does this mean to you?

It means the kind of expertise you need if you manage a corporate or public pension fund, a foundation or an endowment.

We can build a real estate portfolio to fit your cash flow needs and actuarial requirements—precisely. With either a direct real estate investment program or a Mellon Bank closed-end real estate fund.

All it takes is a call to Bob Kinney, President, or Karin Shewer, Vice President at (212) 702-4040.

Or write to them at 551 Madison Avenue, New York, NY 10022.

They can make a big difference for you.

Mellon Real Estate Investment Management Corporation

Other	280
Passive investments:	
Invested in GICs	280
Alternative investments:	
Venture capital	20
Real estate equity	42
Asset mix:	
Stocks	32%
Bonds	10%
Cash equivalents	15%
Real estate equity	5%
GICs	33%
Annuities	5%

Eastern Air Lines Inc.

	($ millions)
Total assets	1,570*
Defined benefit	1,570
Employer contributions	na
Benefit payments	na

*P&I Age estimate

In-house assets:	
Equities	32
Alternative investments:	
Real estate equity	199
Asset mix:	
Stocks	62.3%
Bonds	23.2%
Cash equivalents	1.9%
Real estate equity	12.6%

Eaton Corp.

	($ millions)
Total assets	955
Defined benefit	760
Thrift or savings	195
Employer contributions	45
Benefit payments	50
In-house assets:	
Equities	96
Short term	15
Passive investments:	
Equity indexing	125
Dedicated bond funds	56
International investments:	
Equity	55
Alternative investments:	
Venture capital	8
Asset mix:	
Stocks	70.1%
Bonds	6.5%
Cash equivalents	23.4%

Episcopal Church Pension Fund

	($ millions)
Total assets	1,010
Defined contribution	1,010
Employer contributions	40
Benefit payments	30
In-house assets:	
Short term	50
International investments:	
Equity	10
Fixed income	10
Alternative investments:	
Oil and gas	10
Asset mix:	
Stocks	55%
Bonds	35%
Cash equivalents	3%
Real estate equity	3%
Mortgages	3%
Other	1%

Florida Power & Light

	($ millions)
Total assets	1,058
Defined benefit	738
Defined contribution	132
Thrift or savings	188
Employer contributions	43
Benefit payments	10
Passive investments:	
Equity indexing	153
Invested in GICs	22
International investments:	
Equity	62
Alternative investments:	
Real estate equity	26
Asset mix:	
Stocks	65.2%
Bonds	17.1%
Cash equivalents	11.3%
Real estate equity	3.5%
GICs	2.9%

FMC Corp.

	($ millions)
Total assets	1,300
Defined benefit	1,052
401(k)	248
Employer contributions	10
Benefit payments	40
In-house assets:	
Equities	11
Fixed income	5
Passive investments:	
Dedicated bond funds	76
Invested in GICs	54
International investments:	
Equity	100
Alternative investments:	
Venture capital	40
Asset mix:	
Stocks	78%
Bonds	11%
Cash equivalents	2%
GICs	5%
Other	4%

General Foods Corp.

	($ millions)
Total assets	1,855
Defined benefit	1,526
Defined contribution	320
Other	9
Employer contributions	0
Benefit payments	38
Passive investments:	
Equity indexing	315

Discount Corporation of New York Advisers

Institutional Fixed Income
Asset Management

A Wholly Owned
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Discount Corporation
of New York

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We've been in the financial printing business a long time.

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Of Pandick's 1,200 people, 394 have over 10 years and 489 have over 5 years of experience in our industry.

If you put all of those people and all of those years together, somebody back there could have handed a freshly minted "red herring" to Ramses II.

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Look at it this way.

We print financing and registration documents. It's highly sensitive work, involving total confidentiality, no margin for error and incredibly tight deadlines. It's got to be done yesterday, by a printer who's had experience as recently as yesterday with the same kind of job.

So if you want it done right, remember Pandick. 5,000 years is a lot of yesterdays.

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Full-service offices and plants in New York, Atlanta, Boston, Chicago, Dallas, Houston, Los Angeles, San Francisco and Washington, D.C.
Additional sales offices and satellite plants in major cities nationwide.

Invested in GICs	260
International investments:	
Equity	9
Alternative investments:	
Venture capital	18
Real estate equity	73
Asset mix:	
Stocks	53%
Bonds	14%
Cash equivalents	10%
Real estate equity	5%
GICs	17%
Venture capital	1%

Getty Oil

	($ millions)
Total assets	1,230
Defined benefit	781
401(k)	389
Other	60
Employer contributions	na
Benefit payments	na
In-house assets:	
Cash	151
Passive investments:	
Equity indexing	12
Invested in GICs	367
Asset mix:	
Stocks	40%
Bonds	7%
Cash equivalents	19%
GICs	34%

Grumman Corp.

	($ millions)
Total assets	1,953
Defined benefit	1,392
Thrift or savings	561
Employer contributions	80
Benefit payments	50
In-house assets:	
Equities	546
Fixed income	532
Short term	223
Alternative investments:	
Venture capital	25
Real estate equity	78
Asset mix:	
Stocks	39%
Bonds	32%
Cash equivalents	16%
Real estate equity	5%
Mortgage-backed securities	7%
Other	1%

Halliburton Co.

	($ millions)
Total assets	1,018
Profit-sharing	817
Thrift or savings	167
401(k)	34
Employer contributions	na
Benefit payments	47
In-house assets:	
Equities	92
Fixed income	194
Short term	6
Other	14
Passive investments:	
Invested in GICs	194
International investments:	
Equity	29
Fixed income	3
Alternative investments:	
Mortgages	14
Asset mix:	
Stocks	36%
Bonds	34%
Cash equivalents	9%
Mortgages	1%
GICs	19%
Other	1%

John Hancock Mutual Life Insurance Co.

	($ millions)
Total assets	948
Defined benefit	781
Profit-sharing	134
Thrift or savings	32
401(k)	32
Employer contributions	na
Benefit payments	37
In-house assets:	
Equities	331
Fixed income	282
Short term	47
Other	121
Alternative investments:	
Venture capital	10
Real estate equity	112
Asset mix:	
Stocks	42.4%
Cash equivalents	6%
Real estate equity	14.3%
Mortgages	37.3%

Leasing as corporate financing tool will be examined April 14.

Hercules Inc.

	($ millio
Total assets	1,
Defined benefit	
Thrift or savings	
401(k)	
Employer contributions	
Benefit payments	
Passive investments:	
Equity indexing	
Dedicated bond funds	
Invested in GICs	
International investments:	
Equity	
Alternative investments:	
Real estate equity	
Asset mix:	
Stocks	34
Bonds	1
Cash equivalents	11
Real estate equity	10
GICs	14
International	7
Stock index	2

Honeywell Inc.

	($ millio
Total assets	1,
Defined benefit	1,
Thrift or savings	
401(k)	
Employer contributions	
Benefit payments	
Passive investments:	
Dedicated bond funds	
Invested in GICs	
International investments:	
Equity	
Fixed income	
Alternative investments:	
Venture capital	
Oil and gas	
Real estate equity	
Mortgages	
Asset mix:	
Stocks	4
Bonds	2
Cash equivalents	
Real estate equity	
Mortgages	
GICs	
Venture capital	
Oil and gas	

City of Houston Retirement System

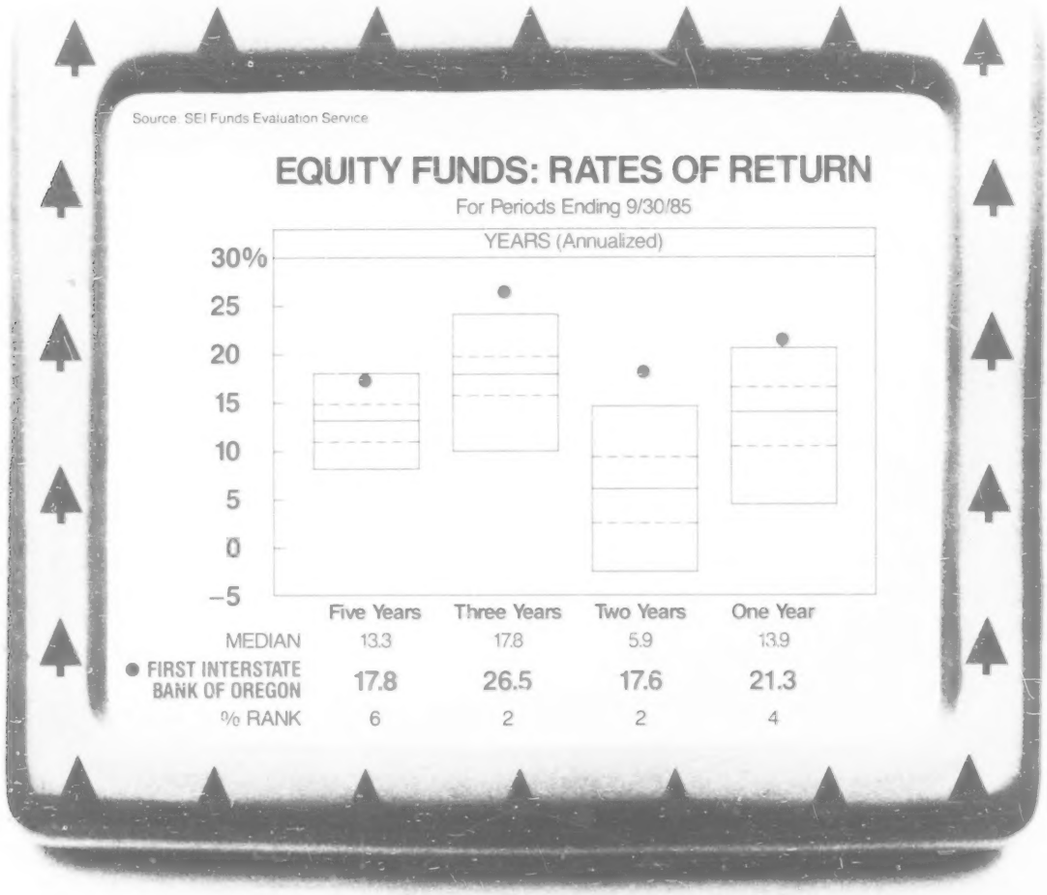
	($ millio
Total assets	
Defined benefit	
Employer contributions	
Benefit payments	
Alternative investments:	
Real estate equity	
Mortgages	
Asset mix:	
Stocks	6
Bonds	1
Cash equivalents	2
Real estate equity	0
Mortgages	0

I.A.M. National Pension Fund

	($ millio
Total assets	
Defined benefit	
Employer contributions	
Benefit payments	
Passive investments:	
Equity indexing	
Fixed-income indexing	
Alternative investments:	
Real estate equity	
Asset mix:	
Stocks	5
Bonds	3
Cash equivalents	
Real estate equity	

Illinois State Board of Investment

	($ millio
Total assets	1,
Defined benefit	1,
Employer contributions	
Benefit payments	
In-house assets:	
Equities	
Fixed income	
Short term	
Alternative investments:	
Venture capital	
Real estate equity	
Mortgages	



Oregon is a great place to bring up your pension funds.

Picture how much larger your company's pension fund would be today if you had invested a few years ago with First Interstate Bank of Oregon.

Our Pension Investment Group has consistently achieved remarkably high rates of return. In fact, we've outperformed 94% of the other U.S. equity funds for the past five years, while assuming considerably less risk.

How? With a unique strategy of investing in low P/E stocks that tend to hold their own in the downturns and participate in up markets.

The approach may sound simple. But executing it isn't. Especially year after year.

Substantial experience, judgment, and analysis go into finding the best of the undervalued stocks. And then knowing when to sell them to maximize profits.

So you don't have to settle for index funds any longer. To get your pension fund outperforming the market, call Bob Belding in Portland today at (503) 225-2363.

Our managers thrive on their work. And making your funds grow.

First Interstate Bank

First Interstate Bank of Oregon, N.A.
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Asset mix:
- Stocks 43%
- Bonds 26%
- Cash equivalents 3%
- Real estate equity 6%
- Mortgages 2%
- Mortgage-backed securities 20%

Illinois State Universities' Retirement System

($ millions)

- Total assets 1,886
- Defined benefit 1,886
- Employer contributions 83
- Benefit payments 102

Passive investments:
- Equity indexing 373
- Invested in GICs 16

Alternative investments:
- Real estate equity 86

Asset mix:
- Stocks 47.1%
- Bonds 40.1%
- Cash equivalents 8.3%
- Real estate equity 4.5%

Indiana Public Employees

($ millions)

- Total assets 1,750
- Defined benefit 1,350
- Defined contribution 400
- Employer contributions 185
- Benefit payments 90

Asset mix:
- Bonds 83%
- Cash equivalents 8%
- Mortgage-backed securities 9%

Indiana State Teachers' Retirement Fund

($ millions)

- Total assets 1,101
- Defined contribution 1,101
- Employer contributions 141
- Benefit payments 160

Passive investments:
- Invested in GICs 20

Asset mix:
- Bonds 66%
- Cash equivalents 7%
- Mortgage-backed securities 25%
- GICs 2%

Inland Steel Co.

($ millions)

- Total assets 1,332
- Defined benefit 1,107
- Thrift or savings 225
- Employer contributions 11
- Benefit payments 90

Passive investments:
- Dedicated bond funds 328
- Invested in GICs 106

International investments:
- Equity 50

Alternative investments:
- Venture capital 5
- Real estate equity 83

Asset mix:
- Stocks 47.3%
- Bonds 22.2%
- Cash equivalents 6.2%
- Real estate equity 7.5%
- Mortgage-backed securities 7.2%
- GICs 9.6%

International Harvester Co. (Navistar International Corp.)

($ millions)

- Total assets 1,047
- Defined benefit 1,042
- Other 5
- Employer contributions 350
- Benefit payments 200

Passive investments:
- Dedicated bond funds 900
- Invested in GICs 25

Alternative investments:
- Real estate equity 120

Asset mix:
- Stocks 0.5%
- Bonds 65%
- Cash equivalents 10%
- Real estate equity 12%
- Mortgage-backed securities 10%
- GICs 2.5%

An in-depth look at investment advisers runs May 16.

International Paper Co.

($ millions)

- Total assets 1,280
- Defined benefit 1,100
- 401(k) 150
- Other 30
- Employer contributions 20
- Benefit payments 70

Passive investments:
- Invested in GICs 50

International investments:
- Equity 15
- Fixed income 10

Alternative investments:
- Real estate equity 80

Asset mix:
- Stocks 55%
- Bonds 25%
- Cash equivalents 7%
- Real estate equity 8%
- GICs 5%

ITT Corp.

($ millions)

- Total assets 2,060
- Defined benefit 1,351
- Profit-sharing 28
- Thrift or savings 551
- Other 130
- Employer contributions na
- Benefit payments na

In-house assets:
- Equities 173
- Fixed income 114
- Short term 29
- Other 12

Passive investments:
- Invested in GICs 118

International investments:
- Equity 53

Alternative investments:
- Real estate equity 84

Asset mix:
- Stocks 59.4%
- Bonds 25.2%
- Cash equivalents 7.2%
- Real estate equity 8.2%

Kaiser Permanente Medical Care Program

($ millions)

- Total assets 900
- Defined benefit 800
- Thrift or savings 100
- Employer contributions na
- Benefit payments na

Asset mix:
- Stocks 30%
- Bonds 70%

Kentucky Retirement Systems

($ millions)

- Total assets 1,656
- Defined benefit 1,656
- Employer contributions 83
- Benefit payments 61

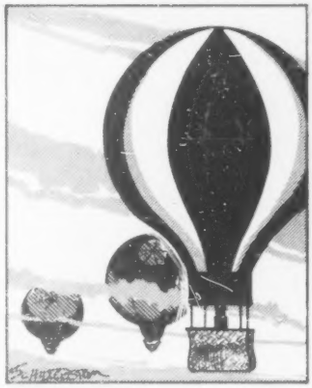
In-house assets:
- Equities 170
- Short term 280

Passive investments:
- Equity indexing 170

Alternative investments:
- Real estate equity 47
- Mortgages 242

Asset mix:
- Stocks 35%
- Bonds 30%
- Cash equivalents 17%
- Real estate equity 3%
- Mortgages 15%

The 50 largest issuers in various segments of the market and a look at how that capital is being raised will be profiled March 17.



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For information, contact: Andy Sheffler, 1500 United Engineers Building, 30 South 17th Street, Philadelphia, PA 19103 • Tel: 215-561-6000

Kentucky Teachers' Retirement System

($ millions)

Total assets ... 1,853
Defined benefit ... 1,853
Employer contributions ... 129
Benefit payments ... 143

In-house assets:
Fixed income ... 114
Other ... 35
Alternative investments:
Real estate equity ... 35
Mortgages ... 106
Asset mix:
Stocks ... 14%
Bonds ... 55%
Cash equivalents ... 18%
Real estate equity ... 2%
Mortgages ... 6%
Mortgage-backed securities ... 5%

K mart Corp.

($ millions)

Total assets ... 1,001
Defined benefit ... 667
Thrift or savings ... 334
Employer contributions ... 40
Benefit payments ... 18

Passive investments:
Equity indexing ... 41
Invested in GICs ... 203
Alternative investments:
Real estate equity ... 66
Asset mix:
Stocks ... 53.8%
Cash equivalents ... 2.2%
Real estate equity ... 9.9%
GICs ... 30.5%
Annuities ... 3.2%
Other ... 0.4%

KMI Continental Inc.

($ millions)

Total assets ... 928
Defined benefit ... 778
401(k) ... 150
Employer contributions ... na
Benefit payments ... na

Passive investments:
Fixed-income indexing ... 530
International investments:
Equity ... 6
Alternative investments:
Venture capital ... 3
Real estate equity ... 58
Asset mix:
Bonds ... 89%
Cash equivalents ... 5%
Real estate equity ... 5%
Venture capital ... 1%

Eli Lilly & Co.

($ millions)

Total assets ... 1,073
Defined benefit ... 668
401(k) ... 405
Employer contributions ... 43
Benefit payments ... 36

Passive investments:
Dedicated bond funds ... 100
International investments:
Equity ... 17
Alternative investments:
Venture capital ... 5
Real estate equity ... 30
Asset mix:
Stocks ... 65%
Bonds ... 17%
Cash equivalents ... 10%
Real estate equity ... 5%
Other ... 3%

Los Angeles City Employees' Retirement System

($ millions)

Total assets ... 1,424
Defined benefit ... 1,424
Employer contributions ... 105
Benefit payments ... 100

In-house assets:
Short term ... 100
Asset mix:
Stocks ... 31%
Bonds ... 61%
Cash equivalents ... 8%

Los Angeles Fire & Police Pension System

($ millions)

Total assets ... 1,757
Defined benefit ... 1,757
Employer contributions ... 213
Benefit payments ... 198
In-house assets:
Short term ... 100
Asset mix:
Stocks ... 48.6%
Bonds ... 22.7%
Cash equivalents ... 10%
Mortgage-backed securities ... 17.5%
Other ... 1.2%

Los Angeles Water and Power Employees' Retirement Plan

($ millions)

Total assets ... 1,037
Defined benefit ... 1,037
Employer contributions ... 120
Benefit payments ... 90

In-house assets:
Short term ... 100
Asset mix:
Stocks ... 26%
Bonds ... 59%
Cash equivalents ... 6%
Mortgage-backed securities ... 9%

Louisiana State Employees' Retirement System

($ millions)

Total assets ... 1,500
Defined benefit ... 1,500
Employer contributions ... 128
Benefit payments ... 164

In-house assets:
Fixed income ... 16
Short term ... 168
Other ... 28
Alternative investments:
Mortgages ... 28
Asset mix:
Stocks ... 7%
Bonds ... 73%
Cash equivalents ... 15%
Mortgages ... 2%
Mortgage-backed securities ... 3%

Marathon Oil

($ millions)

Total assets ... 1,300
Defined benefit ... 600
Thrift or savings ... 640
Other ... 60
Employer contributions ... 30
Benefit payments ... 60
Asset mix:
Stocks ... 80%
Bonds ... 10%
Cash equivalents ... 5%
Annuities ... 5%

Martin Marietta Corp.

($ millions)

Total assets ... 1,705
Defined benefit ... 1,288
Defined contribution ... 417
Employer contributions ... 121
Benefit payments ... 44

In-house assets:
Equities ... 89
Fixed income ... 124
Passive investments:
Invested in GICs ... 87
International investments:
Equity ... 30
Asset mix:
Stocks ... 52%
Bonds ... 41%
GICs ... 7%

McDermott International Inc.

($ millions)

Total assets ... 1,229
Defined benefit ... 1,006
Thrift or savings ... 223
Employer contributions ... na
Benefit payments ... 50

In-house assets:
Equities ... 29
Fixed income ... 857
Short term ... 6
Passive investments:
Dedicated bond funds ... 468
Invested in GICs ... 174
Alternative investments:
Asset mix:
Stocks ... 12%
Bonds ... 70%
GICs ... 18%

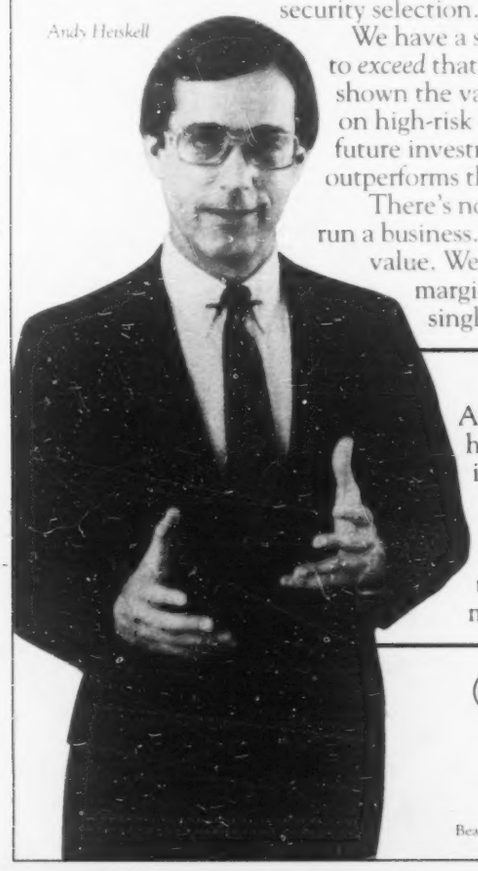
Look for the Money Mover Scorecard, an annual review of the asset management shifts and trends, in the Feb. 3 issue.

Beacon Asset Incorporated. The philosophy works.

"We don't predict interest rates. We don't have to..."

...because our goal-oriented management approach for institutional investors works toward specific objectives. For example, our Index-Plus strategy has the objective of outperforming major bond indexes. We actively manage the components within a portfolio, while keeping the volatility very close to that of the given index. That's important. The sponsor doesn't have to worry about underperforming the market, and we add incremental value by sector and security selection.

Andy Heiskell



We have a specific objective, but intensively manage the portfolio to *exceed* that objective. And usually, we do. Our experience has shown the value of managing securities *themselves* rather than relying on high-risk maturity decisions. Although no one can guarantee future investment performance, we are confident that this method outperforms the key bond indexes *and* produces first quartile results.

There's no hocus pocus involved. We run money the way you run a business. And we win. We win because we add marginal value. We do our best to add marginal value with every single trade..."

Andy Heiskell

Andy Heiskell is a Senior Vice President of Beacon Asset Incorporated. And the "Accumulation Strategy" he's talking about is just one example of the kind of intelligent management he brings to institutional investment portfolios.

If you're interested in actively managed bonds, call Andy. Talk about your objectives. You'll discover that Beacon Asset Incorporated has an institutional management philosophy that works – for you.

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Beacon Asset Incorporated is a wholly-owned subsidiary of Bank of New England Corporation.

Employes' Retirement System of the City of Milwaukee

($ millions)

Total assets	1,000
Defined benefit	1,000
Employer contributions	34
Benefit payments	39
Passive investments:	
Dedicated bond funds	175
Asset mix:	
Stocks	32%
Bonds	58%
Cash equivalents	10%

Minnesota Mining & Manufacturing Co.

($ millions)

Total assets	1,726
Defined benefit	1,550
Thrift or savings	27
401(k)	122
Other	27
Employer contributions	68
Benefit payments	46
Passive investments:	
Equity indexing	112
International investments:	
Equity	121
Alternative investments:	
Venture capital	10
Real estate equity	90
Mortgages	50
Asset mix:	
Stocks	62%
Bonds	30%
Real estate equity	6%
Other	2%

Motorola Inc.

($ millions)

Total assets	977*
Defined benefit	310
Profit-sharing	667
Employer contributions	78
Benefit payments	na
*As of June 30, 1985	
In-house assets:	
Equities	78
Passive investments:	
Equity indexing	29
Invested in GICs	10
International investments:	
Equity	68
Alternative investments:	
Real estate equity	59
Asset mix:	
Stocks	51%
Bonds	33%
Cash equivalents	2%
Real estate equity	6%
GICs	1%
Other	7%

National Rural Electric Cooperative Association

($ millions)

Total assets	1,475*
Defined benefit	na
Defined contribution	na
Employer contributions	126
Benefit payments	na
*As of June 30, 1985	
Asset mix:	
Stocks	42%
Bonds	29%
Cash equivalents	18%
GICs	6%
Other	5%

Public Employees' Retirement System of Nevada

($ millions)

Total assets	1,598
Defined benefit	1,598
Employer contributions	128
Benefit payments	78
In-house assets:	
Real estate	110
Alternative investments:	
Venture capital	4
Real estate equity	45
Mortgages	179
Asset mix:	
Stocks	44.7%
Bonds	25.9%
Cash equivalents	4.3%
Real estate equity	2.9%
Mortgages	11.8%
Mortgage-backed securities	10.1%
Other	0.3%

New Mexico Educational Retirement Board

($ millions)

Total assets	1,069
Defined benefit	1,069
Employer contributions	65
Benefit payments	55
In-house assets:	
Equities	91
Fixed Income	942
Short term	36
Asset mix:	
Stocks	8.5%
Bonds	88%
Cash equivalents	3.5%

Public Employees' Retirement Association of New Mexico

($ millions)

Total assets	973
Defined benefit	973

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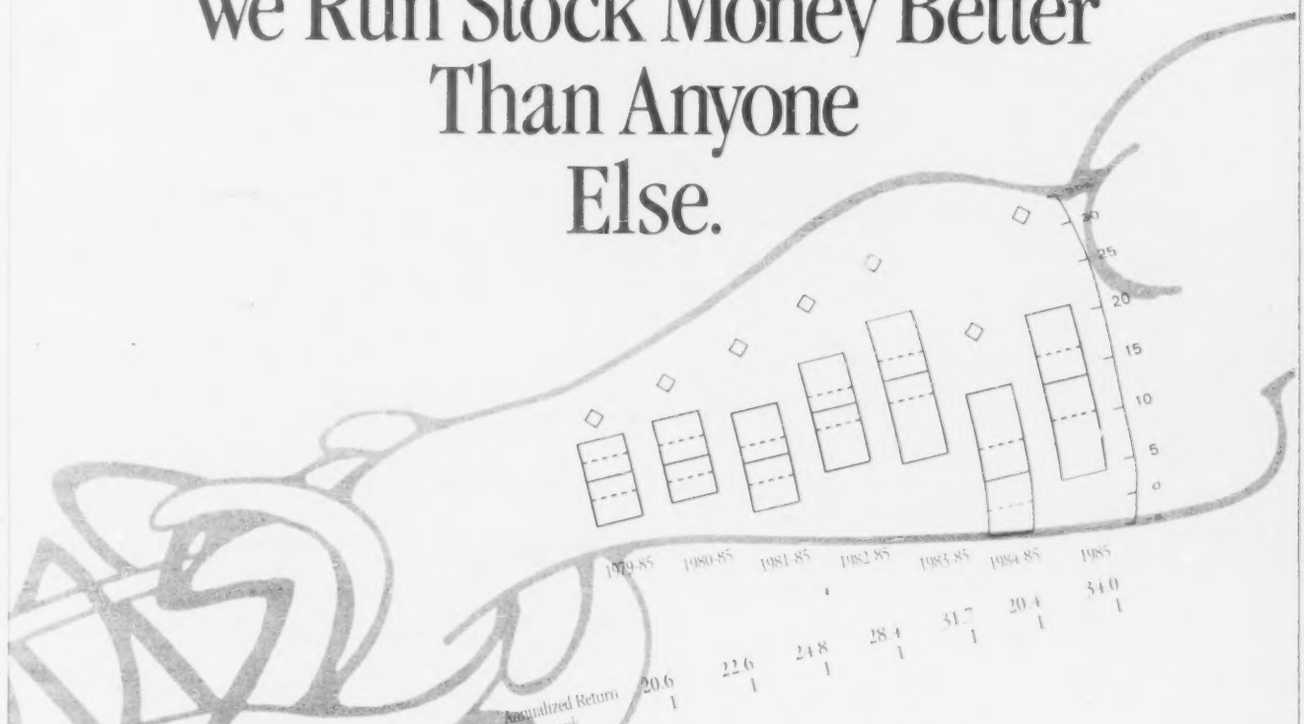

Sun Bank is the front runner.

The Sun Bank Corporate Equity Fund, which invests in common stocks and is used exclusively for employee benefit plans, was ranked #1 by PIPER for 1-year, 3-year, and 5-year performance for periods ending September 30, 1985. Its 1-year investment return of 34% for that period also outranked 99% of the approximately 1,000 equity funds rated by the SEI Funds Evaluation Service.

We go the distance.

Our equity performance is not only exciting, it's consistent. In fact, our Corporate Equity Fund has ranked nationally in the top 1% of SEI-evaluated funds for each of the past seven year periods. We take only average risk. Our high returns come from tried and true investment strategies. And we don't require custody of your pension money — our specialty is in investing your funds and achieving maximum returns.

How's your track record?

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Sun Bank

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Employer contributions 59
Benefit payments 36

In-house assets:
Fixed income 13
Short term 10
Other 15
Asset mix:
Stocks 33.4%
Bonds 40.5%
Cash equivalents 14.8%
Mortgage-backed securities 9.8%
Other 1.5%

New York Life Insurance Co.

($ millions)
Total assets 1,218*
Defined benefit 1,134
Profit-sharing 54
Thrift or savings 23
401(k) 7
Employer contributions 28
Benefit payments 38
*P&I Age estimate

In-house assets:
Fixed income 985
Other 51
Alternative investments:
Real estate equity 29
Asset mix:
Bonds 2.1%
Real estate equity 2.8%
Annuities 95.1%

North American Philips Corp.

($ millions)
Total assets 901
Defined benefit 731
Profit-sharing 15
Thrift or savings 155
Employer contributions 30
Benefit payments 22

Passive investments:
Dedicated bond funds 75
Invested in GICs 10
Alternative investments:
Real estate equity 52
Asset mix:
Stocks 60%
Bonds 20%
Cash equivalents 13%
Real estate equity 5%
GICs 1%
Annuities 1%

Ohio Police & Firemen's Disability & Pension Fund

($ millions)
Total assets 1,848
Defined contribution 1,848
Employer contributions 155
Benefit payments 163

In-house assets:
Fixed income 1,124
Short term 218
Other 6
Passive investments:
Equity indexing 150
Alternative investments:
Venture capital 10
Real estate equity 33
Asset mix:
Stocks 26.6%
Bonds 43%
Cash equivalents 11.8%
Real estate equity 1.8%
Mortgage-backed securities 16.3%
Other 0.5%

School Employees Retirement System of Ohio

($ millions)
Total assets 1,705
Defined benefit 1,705
Employer contributions 197
Benefit payments 162

Alternative investments:
Venture capital 23
Real estate equity 181
Mortgages 73
Asset mix:
Stocks 28.2%
Bonds 24.3%
Cash equivalents 12.9%
Real estate equity 10.8%
Mortgages 4.3%
Mortgage-backed securities 18.8%
Other 0.7%

The annual PIPER report will be featured Feb. 17.

Richard Ellis

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Richard Ellis, Inc. is registered as an investment adv... the Investment Advisers Act of 1940.

Oklahoma Teachers' Retirement System

($ millions)
Total assets 1,312
Defined benefit 1,312
Employer contributions 125
Benefit payments 150

In-house assets:
Short term 278
Asset mix:
Stocks 8.6%
Bonds 66%
Cash equivalents 20.2%
Mortgage-backed securities 5.2%

International Union of Operating Engineers

($ millions)
Total assets 1,241
Defined benefit 1,241
Employer contributions 85
Benefit payments 50

In-house assets:
Fixed income 140
Short term 157
Other 80
Passive investments:
Equity indexing 232
Fixed-income indexing 93
Dedicated bond funds 119
Invested in GICs 155
Alternative investments:
Mortgages 80
Asset mix:
Stocks 28.2%
Bonds 26.6%
Cash equivalents 19.1%
Mortgages 4.8%
Mortgage-backed securities 8.9%
GICs 12.4%

Owens-Illinois Inc.

($ millions)
Total assets 1,499
Defined benefit 1,310
401(k) 189
Employer contributions 14
Benefit payments 100

Passive investments:
Equity indexing 104
Fixed-income indexing 37
International investments:
Equity 119
Fixed income 33
Alternative investments:
Venture capital 17
Oil and gas 3
Real estate equity 116
Mortgages 38
Asset mix:
Stocks 68.3%
Bonds 14.5%
Cash equivalents 5.2%
Real estate equity 9%
Mortgages 3%

Pan American World Airways Inc.

($ millions)
Total assets 1,075
Defined benefit 519
Defined contribution 556
Employer contributions 90
Benefit payments ..... na

International investments:
Equity 15
Asset mix:
Stocks 42%
Bonds 42%
Cash equivalents 16%

J.C. Penney Co.

($ millions)
Total assets 1,830
Defined benefit 805
Profit-sharing 1,018
Thrift or savings 7
Employer contributions ..... na
Benefit payments ..... na

Passive investments:
Equity indexing 18
Invested in GICs 146
Alternative investments:
Real estate equity 90
Asset mix:
Stocks 78%
Bonds 1%
Cash equivalents 8%
Real estate equity 5%
GICs 8%

The use of mutual funds is the focus of a special report May 12.

Philadelphia Municipal Employees' Pension Fund

($ millions)

Total assets	1,097
Defined benefit	1,097
Employer contributions	140
Benefit payments	168
In-house assets:	
Short term	68
Other	45
Asset mix:	
Stocks	37.1%
Bonds	51.6%
Cash equivalents	6.2%
Mortgage-backed securities	1%
Other	4.1%

Philip Morris Inc.

($ millions)

Total assets	1,180
Defined benefit	760
Profit-sharing	370
Other	50
Employer contributions	105
Benefit payments	20
In-house assets:	
Equities	30
Passive investments:	
Equity indexing	35
Dedicated bond funds	45
International investments:	
Equity	30
Alternative investments:	
Real estate equity	12
Asset mix:	
Stocks	50%
Bonds	35%
Cash equivalents	13%
Real estate equity	2%

PPG Industries Inc.

($ millions)

Total assets	1,265
Defined benefit	804
Thrift or savings	461
Employer contributions	14
Benefit payments	63
Passive investments:	
Dedicated bond funds	313
Invested in GICs	10
International investments:	
Equity	14
Asset mix:	
Stocks	33%
Bonds	40%
Cash equivalents	23%
GICs	1%
Other	3%

The Board of Pensions of the Presbyterian Church (U.S.A.)

($ millions)

Total assets	1,104
Defined benefit	1,080
Other	24
Employer contributions	50
Benefit payments	28
In-house assets:	
Fixed income	11
Passive investments:	
Equity indexing	190
Invested in GICs	232
International investments:	
Equity	38
Alternative investments:	
Real estate equity	30
Asset mix:	
Stocks	55%
Bonds	15%
Cash equivalents	5%
Real estate equity	3%
GICs	22%

Raytheon Co.

($ millions)

Total assets	1,365
Defined benefit	1,163
Defined contribution	14
Profit-sharing	6
Thrift or savings	37
401(k)	145
Employer contributions	80
Benefit payments	35
Passive investments:	
Equity indexing	190
Dedicated bond funds	232
Alternative investments:	
Real estate equity	64
Asset mix:	
Stocks	66%
Bonds	22%
Cash equivalents	6%
Real estate equity	6%

Employees Retirement of the State of Rhode Island

($ millions)

Total assets	1,128
Defined benefit	1,128
Employer contributions	na
Benefit payments	na
In-house assets:	
Equities	433
Fixed income	512
Other	183
Asset mix:	
Stocks	38.4%
Bonds	45.4%
Cash equivalents	16.2%

Southern Baptist Convention Annuity Board

($ millions)

Total assets	1,600
Defined benefit	600
Defined contribution	900
Other	100
Employer contributions	95
Benefit payments	30
In-house assets:	
Equities	15
Fixed income	1,090
Short term	20
Other	75
Passive investments:	
Invested in GICs	600
Asset mix:	
Stocks	20%
Bonds	17%
Cash equivalents	10%
Mortgages	5%
Mortgage-backed securities	10%
GICs	38%

Southern California Edison

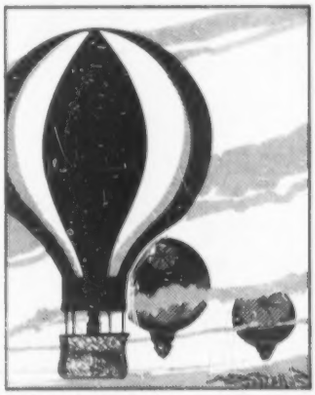
($ millions)

Total assets	1,362
Defined benefit	853
Thrift or savings	509
Employer contributions	na
Benefit payments	na
Passive investments:	
Invested in GICs	115
International investments:	
Equity	19
Alternative investments:	
Venture capital	10
Real estate equity	10
Asset mix:	
Stocks	49%
Bonds	31%
Cash equivalents	4%
Real estate equity	1%
GICs	14%
Venture capital	1%

Southern Co. Services Inc.

($ millions)

Total assets	1,650
Defined benefit	1,300
Thrift or savings	350
Employer contributions	73
Benefit payments	32
Passive investments:	
Dedicated bond funds	150
Invested in GICs	50
Alternative investments:	
Real estate equity	10
Asset mix:	
Stocks	48%
Bonds	26%
Cash equivalents	21%



"I want to buy a home. *I don't care if it's a condo, townhouse, flat, studio, brick, wood, new, old ... I just want to buy something that's mine, something I can point to and say, 'here, this is my home, I bought it, it's mine, want to come inside and see my kitchen?' And with one more raise, I can do it.*"

Owning a home. It's been an American dream for 200 years.

It's an obsession that neither inflation, deflation, sky-high interest rates nor recession can dampen.

Our continuing commitment to provide Americans with affordable mortgages is one reason why 60% of all Americans today do own their own homes, why for them the dream has been realized.

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And why L&N has not once missed or reduced a single quarterly dividend since our first one in 1971.

As long as Americans dream of owning their own home, Lomas & Nettleton will be there to make their dreams come true.

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Real estate equity	1%
GICs	4%

Southern New England Telephone Co.

	($ millions)
Total assets	1,075
Defined benefit	950
Thrift or savings	125
Employer contributions	41
Benefit payments	37
Passive investments:	
Equity indexing	173
Alternative investments:	
Real estate equity	38
Mortgages	1
Asset mix:	
Stocks	59%
Bonds	28%
Cash equivalents	9%
Real estate equity	4%

Standard Oil Co. (Ohio)

	($ millions)
Total assets	1,442*
Defined benefit	938
Profit-sharing	428
Thrift or savings	76
Employer contributions	104
Benefit payments	na

*P&I Age estimate

Asset mix:	
Stocks	78%
Bonds	2%
Cash equivalents	20%

Sun Co.

	($ millions)
Total assets	1,470
Defined benefit	1,205
Defined contribution	9
401(k)	256
Employer contributions	22
Benefit payments	99
Passive investments:	
Equity indexing	81
Invested in GICs	78
International investments:	
Equity	175
Alternative investments:	
Real estate equity	177
Asset mix:	
Stocks	61%
Bonds	15%
Cash equivalents	3%
Real estate equity	15%
GICs	6%

Teledyne Inc.

	($ millions)
Total assets	1,089*
Defined benefit	1,089
Employer contributions	na
Benefit payments	na

*P&I Age estimate

In-house assets:	
Equities	413
Fixed income	635
Short term	41
Asset mix:	
Stocks	38%
Bonds	58%
Cash equivalents	4%

Tenneco Inc.

	($ millions)
Total assets	1,879
Defined benefit	1,222
Profit-sharing	1
Thrift or savings	20
401(k)	581
Other	55
Employer contributions	143
Benefit payments	35
In-house assets:	
Equities	175
Fixed income	401
Passive investments:	
Equity indexing	149
Asset mix:	
Stocks	47%
Bonds	48%
Cash equivalents	5%

Tennessee Valley Authority

	($ millions)
Total assets	1,753
Defined benefit	1,674
Thrift or savings	79
Employer contributions	72
Benefit payments	70
Passive investments:	
Equity indexing	230
Fixed-income indexing	50
Dedicated bond funds	38
Invested in GICs	92
Alternative investments:	
Real estate equity	21
Asset mix:	
Stocks	35.8%
Bonds	48.5%
Cash equivalents	7.9%
Real estate equity	1.2%
GICs	6.6%

Texaco Inc.

	($ millions)
Total assets	2,028*
Defined benefit	1,415
Defined contribution	550
Other	63
Employer contributions	na
Benefit payments	na

*P&I Age estimate

Passive investments:	
Invested in GICs	55
Alternative investments:	
Real estate equity	67
Asset mix:	
Stocks	46%
Cash equivalents	3%
Real estate equity	5%
GICs	4%
Other	42%

Texas County & District Retirement System

	($ millions)
Total assets	1,127*
Defined contribution	1,127
Employer contributions	68
Benefit payments	29

*P&I Age estimate

In-house assets:	
Fixed income	1,071
Short term	56
Asset mix:	
Bonds	95%
Cash equivalents	5%

Texas Instruments Inc.

	($ millions)
Total assets	930
Defined benefit	650
Profit-sharing	260
401(k)	20
Employer contributions	na
Benefit payments	15
Passive investments:	
Dedicated bond funds	7
Alternative investments:	
Venture capital	7
Real estate equity	30
Asset mix:	
Stocks	60%
Bonds	15%
Cash equivalents	15%
Real estate equity	5%
Other	5%

Texas Municipal Retirement System

	($ millions)
Total assets	1,200
Defined contribution	1,200
Employer contributions	75
Benefit payments	34
In-house assets:	
Equities	6
Fixed income	1,194
Asset mix:	
Stocks	0.5%
Bonds	99.5%

Trans World Airlines Inc.

	($ millions)
Total assets	2,008
Defined benefit	996
Defined contribution	938
Thrift or savings	41
Other	33
Employer contributions	105
Benefit payments	205
Passive investments:	
Equity indexing	300
Invested in GICs	270
International investments:	
Equity	15
Alternative investments:	
Real estate equity	24
Asset mix:	
Stocks	47%
Bonds	4%
Cash equivalents	8%
Real estate equity	1%
GIC	15%
Other	25%

MOST MASTER TRUST TEAMS ARE CONNECTED BY TELEPHONE. NOT OURS.

It's pretty obvious that a Master Trust team can only run at peak efficiency when everyone on the team knows what everyone else is doing.

However, of all major money center banks, only The Bank of New York seems to have figured out that the way to achieve this is not via telephone tag.

It's by having each Master Trust team work together–not just figuratively, but literally. Desk to desk. Terminal to terminal.

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Travelers Insurance Co.

	($ millions)
Total assets	1,265
Defined benefit	960
Defined contribution	305
Employer contributions	76
Benefit payments	43
In-house assets:	
Equities	300
Fixed income	500
Short term	20
Other	140
Passive investments:	
Equity indexing	20
Invested in GICs	420
International investments:	
Equity	40
Fixed income	20
Alternative investments:	
Real estate equity	55
Mortgages	30
Asset mix:	
Stocks	32%
Bonds	8%
Cash equivalents	2%
Real estate equity	6.2%
Mortgages	2.8%
GICs	43%
Other	6%

TRW Inc.

	($ millions)
Total assets	1,391
Defined benefit	1,391
Employer contributions	71
Benefit payments	93
In-house assets:	
Equities	200
International investments:	
Equity	93
Cash	2
Alternative investments:	
Venture capital	18
Asset mix:	
Stocks	70.5%
Bonds	19.5%
Cash equivalents	10%

United Methodist Pension Fund

	($ millions)
Total assets	1,945
Defined contribution	1,945
Employer contributions	160
Benefit payments	120
In-house assets:	
Short term	26
Other	300
Passive investments:	
Equity indexing	296
Dedicated bond funds	35
Invested in GICs	300
Alternative investments:	
Real estate equity	46
Asset mix:	
Stocks	54.7%
Bonds	10%
Cash equivalents	17.5%
Real estate equity	2.4%
GICs	15.4%

Unocal Corp.

	($ millions)
Total assets	1,272
Defined benefit	885
Profit-sharing	387
Employer contributions	55
Benefit payments	70
International investments:	
Equity	28
Alternative investments:	
Venture capital	7
Real estate equity	42
Asset mix:	
Stocks	44%
Bonds	8%
Cash equivalents	17%
Real estate equity	5%
Mortgage-backed securities	1%
Other	25%

State of West Virginia

	($ millions)
Total assets	1,116
Other	1,116
Employer contributions	96
Benefit payments	128

A directory of financial organizations and associations appears March 31. The directory takes a look at associations and organizations involved in treasury and investment management functions.

In-house assets:	
Fixed income	948
Short term	168
Alternative investments:	
Mortgages	37
Asset mix:	
Bonds	80.5%
Cash equivalents	15.1%
Mortgages	3.3%
Mortgage-backed securities	1.1%

World Bank

	($ millions)
Total assets	1,461
Defined benefit	1,461
Employer contributions	61
Benefit payments	na
Passive investments:	
Equity indexing	219
International investments:	
Total	307
Alternative investments:	
Venture capital	29
Real estate equity	58
Mortgages	44
Asset mix:	
Stocks	41%
Bonds	19%
Cash equivalents	10%
Real estate equity	4%
Mortgage-backed securities	3%
International	21%
Other	2%

Xerox Corp.

	($ millions)
Total assets	1,845
Defined benefit	150
Defined contribution	1,367
Thrift or savings	310
Other	18
Employer contributions	na
Benefit payments	na
International investments:	
Equity	122
Fixed income	22
Alternative investments:	
Oil and gas	5
Real estate equity	190
Asset mix:	
Stocks	65.3%
Bonds	9.4%
Cash equivalents	12.8%
Real estate equity	12.5%

Funds with indexed bonds
($ millions)

Fund	Assets
AT&T	$2,922
Pennsylvania Public School	2,022
NYNEX Corp.	1,200
Teamsters, Central States	900
KMI Continental	530
Pennsylvania State Employees	525
N.Y.C. Retirement Systems	371
U S WEST	345
Deere & Co.	250
GTE Corp.	240
Washington State Board	198
Arizona State System	191
United Mine Workers	170
Sperry Corp.	160
I.A.M. National	103
Intl. Union of Oper. Eng.	93
Tennessee Valley Authority	50
Owens-Illinois Inc.	37
Total	**$10,307**

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Payments top . . .

Continued from page 15

Phillips Petroleum's benefit payments nearly quintupled, going to $355 million from $74 million, mostly because of an early retirement program implemented as part of a corporate restructuring after fighting off T. Boone Pickens' hostile takeover attempt.

Phillips officials said another reason for the rise in payments was that many retiring employees chose to take lump-sum distributions instead of annuities. Another oil company, Chicago-based Amoco Corp., had the opposite experience. Its benefit payments decreased 26%, to $177 million from $240 million, because fewer retirees took lump-sum distributions in 1985 than in 1984.

Yet another firm in that industry, Conoco Inc., Wilmington, Del., saw its benefit payments increase nearly fivefold, to $300 million from $65 million, because of a one-time early retirement opportunity program.

Conoco's parent company, Du Pont, also offered an early retirement program in 1985, resulting in its benefit payments increasing 33%, to $533 million from $400 million. The Conoco and Du Pont pension funds are run separately.

A Du Pont official asked about the prevalence of early retirement programs in the oil industry, said they are not necessarily a trend in that industry, but in U.S. companies generally. Corporations in many industries are using such programs to reduce their work forces, he said.

Another reason for increased benefits, according to TPF&C principal Thomas Terry, is that payments under defined benefit plans have begun to reflect post-inflation enhancements fully.

Also, TPF&C officials said some benefit increases may be traced to distributions from the retirement savings plans that preceded 401(k) plans.

Public, union and miscellaneous pension funds showed different trends in contributions and benefits than did corporate funds. Among the 57 public funds that placed in the Top 200 in both 1985 and 1984 and provided contribution and benefit figures both years, contributions increased 17.4%, to $17.5 billion from $14.9 billion, while benefits increased just 4.4%, to $14.3 billion from $13.7 billion.

Experts attributed the increase in contributions to an effort to cut unfunded liabilities.

In the public arena in the past, maybe the contributions that have been made haven't been sufficient to fund the benefits that have been promised," said Lloyd Nordstrom, a Wyatt actuary.

Also, because some public funds operate under laws that limit them to rather conservative investments, they may not have realized such favorable investment performance as corporate funds and therefore needed greater contributions, Mr. Nordstrom said.

Another factor is that new employee groups, such as employees of local government units, may have joined statewide public retirement systems, said John Mackin, senior vice president of Martin E. Segal & Co., New York.

Union and miscellaneous funds showed little change in contributions or benefits. Six union funds placed in the Top 200 in 1985 and 1984 and provided contribution and benefit figures both years. Their contributions increased 2.6%, to $1.95 billion from $1.9 billion, while benefit payments increased 6.2%, to $1.7 billion from $1.6 billion.

Contributions to union funds tend to be stable or to increase because they are collectively bargained, said Robert D. Krinsky, president of Martin E. Segal, New York. "It is not up to the corporation as to how much they want to fund it," he said.

Among the seven miscellaneous funds that provided data for both years, contributions increased 7.1%, to $3 billion from $2.8 billion, while benefit payments increased 10%, to $1.1 billion from $1 billion. These funds include the nation's largest pension fund, the $40 billion Teachers Insurance and Annuity Association — College Retirement Equities Fund, church funds and service institutions. ■

Midwest has trading gains

CHICAGO — The Midwest Stock Exchange Inc. and its subsidiaries had a record-breaking year. Trading volume topped 2.35 billion shares, a 28.6% increase from 1984.

Activity at the Midwest Clearing Corp. increased 9%; assets on deposit with the Midwest Securities Trust Co. rose 36.2% to $150 billion; and the MBS Clearing Corp. processed $220 billion in trades for the mortgage-backed securities industry, a 50% increase.

Public plans increase . . .

Continued from page 16

"The labor officials ask, 'What's in it for us?' "

As a result, he said, labor members often want to renegotiate.

Dedication cuts flexibility; it could absorb a substantial bulk of an underfunded plan's assets, Mr. Kaplan said.

Officials of the Ohio teachers' fund turned to a $115 million dedication to finance a 5% "ad hoc increase" in benefits granted to retirees by the Ohio Legislature, said Stephen A. Mitchell, assistant executive director-investments, of the $10.2 billion fund.

"The actuaries said we would need $310 million to cover the liability of the 5% increase.

"At that time, rates were fairly high and we wanted to find a way to offset the (liability) of the benefits . . . so we dedicated $115 million, locking up a 13.07% return for the next 15 years.

"At the end of 15 years, a substantial amount of money will mature, which, if reinvested at 7.5% — the fund's present actuarial assumed rate of return — will cover the remaining existing liability at that time."

Officials of the internally managed fund used zero-coupon bonds to set up the dedication, which has a market value of about $140 million.

The Minnesota board, which oversees $6.8 billion in pension assets as well as some other state funds, dedicated $2 billion of its $2.7 billion fund for retirees late in 1984, said Howard J. Bicker, executive director.

The dedicated portfolio is run in-house and is largely in government bonds, Mr. Bicker said. He said the board set up the portfolio to protect benefits for the retirees, whose pension liabilities are 100% funded. The retired lives fund was split from the fund for active employees several years ago.

The Minnesota board also built a 3% benefit increase into the dedicated portfolio, Mr. Bicker said. The remaining $700 million in the retirees' fund is in equities, he said.

The $138 million Kansas City public school fund may have been the first public fund to dedicate. James C. Baker, executive secretary, said fund officials did their first dedication in 1979, locking in 14% to cover the liability of all retirees. Fund officials have done a dedication every year since.

All dedications were set up and managed by Scudder, Stevens & Clark, Los Angeles.

In 1985, the fund dedicated $8 million, locking in 12%, to cover all those who retired in 1984. The fund has dedicated a total of $40 million, locked in at a summary average of 12%, Mr. Baker said.

Even some underfunded plans consider dedicating. Richard Cohee, treasurer of the Jacksonville (Fla.) City Retirement System, had toyed with a dedication as part of a strategy to offset the fund's approximate $200 million unfunded liability.

About 1½ years ago, city officials had planned to sell city bonds to fund a dedication to cover the unfunded pension liabilities.

However, before the fund could act, interest rates dropped. Also, that kind of technique fell out of favor with the U.S. Treasury, which in effect outlawed it in tax laws, Mr. Cohee said.

He said fund officials are not averse to doing a dedication, but are "not terribly inclined to move large amounts of money to lock up low interest rates."

"When interest rates were higher, it was an easier decision," agreed Mr. Baker, which eventually will have to decide if it wants to do a dedication to cover the liabilities of employees retired last year.

Sponsors with internal pension fund management

($ millions)

Fund	Assets
TIAA-CREF	$40,000
California Public Employees	29,166
New York State Common Fund	22,792
N.Y. State Teachers System	12,644
General Electric Co.	12,504
New Jersey Division of Investment	12,494
Texas Teachers	11,188
Wisconsin Investment Board	10,800
Michigan State Employees	10,516
Ohio Public Employees	10,500
Ohio State Teachers	10,178
North Carolina Employees	8,645
U.S. Steel Corp.	8,000
E.I. du Pont de Nemours	7,841
AT&T	6,100
Georgia State Systems	6,053
IBM Corp.	5,900
University of California	5,200
N.Y.C. Retirement Systems	5,132
Colorado Public Employees	5,024
Alabama Retirement Systems	4,744
Florida Dept. of Admin.	4,643
United Nations Joint Staff	4,354
Tennessee Consolidated	4,249
Texas Employees	3,300
Washington Investment Board	3,271
Union Carbide Corp.	2,800
Minnesota State Board	2,700
Bethlehem Steel Corp.	2,575
Mass. Employees & Teachers	2,564
Westinghouse Electric Corp.	2,535
Maryland State System	2,518
Oregon Public Employees	2,500
Exxon Corp.	2,305
Chicago Public School Teachers	2,074
Metropolitan Life Insurance Co.	1,980
Virginia Supplemental System	1,822
Sears, Roebuck & Co.	1,766
Alaska State Systems	1,585
Utah State Employees	1,531
Citicorp	1,432
Procter & Gamble	1,365
Ohio Police & Firemen	1,348
Connecticut Trust Funds	1,331
Commonwealth Edison Co.	1,329
Grumman Corp.	1,301
Deere & Co.	1,300
Illinois State Board	1,284
Southern Baptist Church	1,200
Texas Municipal System	1,200
Rhode Island Employees	1,128
Texas County & District	1,127
West Virginia Employees	1,116
GTE Corp.	1,111
Teledyne Inc.	1,089
Aetna Life & Casualty	1,086
San Francisco Employees	1,082
New Mexico Educational Board	1,069
Shell Oil Co.	1,045

Fund	Assets
New York Life Insurance Co.	1,036
L.A. County Employees	983
Travelers Insurance Co.	960
American Airlines	900
McDermott International Inc.	893
Sperry Corp.	867
John Hancock Mutual Life	781
Hawaii Employees System	778
CIGNA Corp.	762
Allied-Signal Inc.	750
LTV Corp.	631
Ford Motor Co.	600
General Dynamics Corp.	600
Tenneco Inc.	576
Chrysler Corp.	570
Armco Inc.	562
Dow Chemical Co.	530
Pennsylvania Public School	504
Amoco Corp.	479
Kentucky Retirement Systems	450
R.J. Reynolds	402
Intl. Union of Oper. Eng.	378
Dresser Industries	350
Louisiana Teachers System	350
ITT Corp.	327
United Methodist	326
Halliburton Co.	306
United Mine Workers	290
Iowa Public Employees	286
Oklahoma Teachers System	278
Kansas Public Employees	263
Arizona State System	250
Martin Marietta Corp.	213
Louisiana State Employees	212
American Can Co.	200
TRW Inc.	200
Bechtel Power Corp.	175
Getty Oil	151
Kentucky Teachers System	149
Detroit Retirement Systems	142
Philadelphia Municipal Employees	113
Eaton Corp.	111
Nevada Public Employees	110
L.A. Water & Power	100
L.A. City Employees	100
L.A. Fire & Police	100
Dart & Kraft Inc.	89
Arkansas Teacher System	68
Ashland Oil	56
Episcopal Church	50
Illinois Municipal Employees	45
Teamsters, Central States	45
New Mexico Public Employees	37
Eastern Air Lines Inc.	32
Philip Morris	30
FMC Corp.	16
Boilermakers & Blacksmiths	14
Presbyterian Church	11
Total	**$339,123**

Mergers . . .

Continued from page 15

are absorbed by the companies that acquired them:

• Getty Oil Co., Los Angeles, ranked 158th as of Sept. 30 with assets of $1.2 billion, was acquired by Texaco Inc., White Plains, N.Y.

• General Foods Corp., White Plains, 110th with assets of $1.9 billion, was acquired by Philip Morris Inc., New York.

• RCA Corp., New York, 75th with assets of $2.7 billion was acquired by General Electric Co., Stamford, Conn.

• Hughes Aircraft Co., Culver City, Calif., 70th with assets of $3 billion, was acquired by General Motors Corp., New York.

Three other funds dropped off the Top 200 because their assets didn't grow as much as others.

Sandia National Laboratories, Albuquerque, N.M., dropped to 218th from 200th, although its assets increased 11% to $849 million in the year ended Sept. 30.

Charles M. Mika, supervisor of benefits planning and pension fund management, said Sandia's contribution level of 4% to 5% of payroll expense is lower than the contribution level of many corporations, and has fallen from previous years.

He said the fund's investments have performed well and it is more fully funded than in the past.

Pension assets of the Dallas-based Army and Air Force Exchange Service, Dallas, increased more slowly in the year ended Sept. 30 because benefit payments jumped, said Ken C. Weaver, assistant chief of AAFES' insurance branch. The fund fell to 208th as of Sept. 30 from 199th a year ago, although its assets grew 15% to $879 million from $765 million.

While the fund's contribution remained about the same this year, benefit payments increased 8.5% in 1985, Mr. Weaver said. The number of retirees in the plan rose 6% from 1983 to 1984, the most recent year for which he could provide data. But he said the plan is experiencing similar growth in the number of retirees.

The assets of the Marine Engineers Benefit Association, Baltimore, grew 6.7%, but the rate of increase was lower than the previous year and insufficient to keep it among the 200 largest. MEBA, which reported total assets of $896 million as of Sept. 30, compared with $840 million a year ago, fell to 204th from 188th.

Although only one corporation dropped out of the Top 200 because it terminated an overfunded pension plan, the effects of terminations under way now are likely to be reflected in next year's ranking.

Firestone Tire & Rubber Co., Akron, Ohio, recaptured $284 million in a termination/re-establishment of its defined benefit plan for salaried workers. As a result, the fund moved to 403rd place as of Sept. 30 — with $419 million in assets — from 173rd and $964 million in assets a year ago.

Next year, United Air Lines Inc., Chicago, is expected to lose its position as the 65th largest U.S. employee benefit fund because of plans to recapture nearly $1 billion in surplus assets from the largest reversion to date. United had $3.4 billion in assets as of June 30, according to the 1986 Money Market Directory.

Union Carbide Corp., Danbury, Conn., which is ranked 74th this year with $2.8 billion in pension assets, will move down following its recapture of $500 million, or half the excess assets in its overfunded defined benefit plans for

PRIT liability met aggressively

By Alan Krauss

BOSTON — The Pension Reserve Investment Trust has charted a more aggressive investment course to help reduce an estimated $11 billion unfunded liability plaguing Massachusetts' public pension funds.

After establishing an asset mix of 50% stocks, 40% bonds and 10% real estate, PRIT officials allocated $100 million to its first real estate managers; $25 million to a new fixed-income manager; and $147 million to six existing equity managers.

Sandra Whiston, director of financial operations, said PRIT's board adopted the more aggressive stance after actuarial studies showed unfunded liabilities of about $11 billion among all of the state's public retirement systems.

(PRIT is a $1 billion trust that invests the retirement assets of six Massachusetts communities and part of the $2.9 billion Massachusetts State Employees' & Teachers' Retirement System. PRIT, established by the Legislature in 1983 and receiving its first allocations in 1984, was part of an effort to curb unfunded liabilities statewide.)

The goal is to project returns that, reinvested, would allow PRIT to make progress toward covering those unfunded liabilities, she said.

PRIT officials have a target asset allocation of 50% equity, 30% fixed, 15% real estate, 5% venture capital.

The board is interviewing venture capital managers, and expects to select them during the first quarter.

In real estate, $100 million was given to seven commingled funds: three open-end pools; three closed-end pools; and a limited partnership.

Bank of Boston received $25 million for an open-end fund that acquires existing properties; $15 million went to an open-end fund managed by Copley Real Estate Advisors, Boston, that invests in development joint ventures; and $5 million went to Massachusetts Mutual Life Insurance Co., Springfield, for a diversified open-end pool.

Boston Financial Technology Group, a syndication firm Ms. Whiston said is making its first foray into the tax-exempt arena, received $5 million for a new closed-end fund that will invest in a variety of property types in smaller markets.

PRIT put $25 million into Group Trust IV, a closed-end fund run by JMB Institutional Realty Corp., Chicago, which invests in shopping centers and office buildings; and $15 million into Los Angeles-based TCW Realty Advisors' closed-end Real Estate Fund IV, which invests in office, retail and industrial properties.

Another $10 million will go into John Hancock Companies' new Apartment Fund II, a closed-end limited partnership.

Ms. Whiston said trust officials evaluated 36 real estate investment managers responding to the board's initial request for proposals. Presentations by 10 firms were heard before the final selections were made. Wilshire Associates, Santa Monica, Calif., was the consultant.

PRIT also hired M.D. Sass Investors Services Inc., New York, to run a $25 million fixed-income portfolio of what Ms. Whiston called actively managed, mortgage-related investments, including both mortgages and mortgage-backed securities. She said Sass was not funded during the trust's first round of manager hirings in September because PRIT's fixed-income allocation was covered by other managers at that point.

She said the Sass portfolio would complement the trust's other fixed-income managers because of its heavy mortgage orientation.

A total of $147 million went to six firms that already had PRIT assets under management.

Alliance Capital Management Corp., New York, received $75 million to add to the $115 million it manages in an equity index fund based on the Standard & Poor's 500 stock index.

Five active equity managers got additional PRIT allocations: Bear, Stearns Asset Management Inc., New York, which received $12 million and now has a total of about $51 million; Lazard Freres Asset Management, New York, $20 million for a total of $85 million; Trinity Investment Management Corp., Boston, $20 million for a total of $100 million; United States Trust Co. of Boston, $5 million for a total of $16 million; and Wright Investors' Service, Bridgeport, Conn., $15 million for a total of $51 million.

Separately, PRIT announced its non-annualized rate of return for the 11 months ended Nov. 30 was 18.74%. The return figure included non-annualized rates for the same period of 23.76% on PRIT's equity portfolio (vs. 26.07% for the S&P 500); 21.23% on its fixed-income portfolio (vs. 17.67% for the Shearson Lehman Government/Corporate bond index); and 7.55% on cash and cash equivalents (vs. 7.11% for 90-day Treasury securities). ■

Funds investing in real estate equity

($ millions)

Fund	Assets
AT&T	$2,011
California Public Employees	1,636
Ohio State Teachers System	1,261
TIAA-CREF	1,116
Teamsters, Western Conference	662
K mart Corp.	659
NYNEX Corp.	633
Florida Dept. of Admin.	612
Exxon Corp.	610
Pennsylvania Public School	580
Prudential Insurance Co.	523
Ameritech	515
Westinghouse Electric Corp.	515
General Electric Co.	478
American Stores	427
Connecticut Trust Funds	413
Pennsylvania State Employees	404
United Nations Joint Staff	388
Oregon Public Employees	360
California Teachers	329
Shell Oil Co.	289
Southwestern Bell Corp.	285
United Mine Workers	236
Virginia Supplemental System	227
Eastman Kodak	218
U S WEST	215
United Technologies Corp.	210
Allied-Signal Inc.	200
Minnesota State Board	200
Eastern Air Lines Inc.	199
Caterpillar Tractor Co.	198
Armco Inc.	196
Xerox Corp.	190
Wisconsin Investment Board	184
Chevron Corp.	182
Ohio School Employees	181
Monsanto Co.	180
Sun Co. Inc.	177
Boilermakers & Blacksmiths	177
United Air Lines	171
Ohio Public Employees	170
Goodyear Tire & Rubber Co.	168
RCA Corp.	160
Alaska State Retirement Systems	157
Utah State Employees	139
Pacific Gas & Electric	126
Phillips Petroleum Co.	126
Illinois State Board	124
Washington Investment Board	123
International Harvester	120
Owens-Illinois Inc.	116
R.J. Reynolds	114
John Hancock Mutual Life	112
Aluminum Co. of America	106
San Francisco Employees	104
Hercules Inc.	100
Colorado Public Employees	100
Illinois Teachers	100
Honeywell Inc.	100
Amoco Corp.	94
Minnesota Mining & Mfg.	90
North Carolina Employees	88
Illinois State Universities	86
ITT Corp.	84
Inland Steel Co.	83
International Paper	80
Chrysler Corp.	79
Grumman Corp.	78
General Foods Corp.	73
Aetna Life & Casualty	72
Ford Motor Co.	70
Texaco Inc.	67
Illinois Municipal Employees	66
Conoco Inc.	65
Raytheon	64
GTE Corp.	60
KMI Continental	58
World Bank	58
American Can Co.	55
Travelers Insurance Co.	55
Dow Chemical Co.	53
North American Philips	52
Chicago Municipal Employees	50
Cooper Industries Inc.	50
Sears, Roebuck & Co.	50
Kentucky Retirement Systems	47
United Methodist	46
Nevada Public Employees	45
N.Y. State Teachers	43
Dresser Industries	42
I.A.M. National	42
Unocal Corp.	42
Union Carbide Corp.	40
So. New England Telephone	38
Kentucky Teachers System	35
Michigan State Employees	33
Ohio Police & Firemen	33
CIGNA Corp.	30
Eli Lilly & Co.	30
Presbyterian Church	30
Texas Instruments Inc.	30
New York Life Insurance Co.	29
Florida Power & Light	26
Trans World Airlines Inc.	24
Teamsters, Central States	24
Citicorp	23
Detroit Systems	21
Tennessee Valley Authority	21
Deere & Co.	19
Hawaii Employees Systems	19
E.I. du Pont de Nemours	17
Ashland Oil	13
Philip Morris	12
Kansas Public Employees	12
L.A. County Employees	10
Southern California Edison	10
Southern Co. Services Inc.	10
Houston Retirement System	7
Alabama Retirement Systems	4
Georgia State Systems	3
Arizona State System	3
Total	**$23,305**

PBGC liabilities . . .

Continued from page 16

dropped Alliance Capital Management, New York, as manager of a $120 million equity account.

Hired in January 1985 were Lazard Freres Asset Management and Lehman Management Co., both of New York, and InterFirst Investment Management Inc., Dallas, to each run $50 million in equity assets.

In March, the agency picked M.J. Whitman & Co. to handle between $10 million and $20 million in special situation assets.

The PBGC also has experimented with pilot programs that provide downside protection on bond assets.

In September, the agency hired Chase Investors Management Corp., New York, to insure a $10 million portfolio that is internally managed; Leland O'Brien Rubinstein Associates Inc., Los Angeles, backs up $15 million for the agency in a similar program, now in its third year.

The changes are part of an overhaul of the agency's investments, which saw greater emphasis placed on fixed-income assets and less on equities, as well as the addition of real estate investments.

As of Sept. 30, equity managers — besides those listed above — were Chase Investors; Dimensional Fund Advisors, Santa Monica, Calif.; McCowan Associates Inc., New York; Rollert & Sullivan Inc., Boston; and United Capital Management, Denver.

Pacific Investment Management Co., Newport Beach, Calif., manages the agency's fixed-income investments, except for a $250 million account run by Morgan Stanley Asset Management Inc., New York. The latter portfolio comprises the agency's revolving funds, which are composed largely of employer-paid premiums and are required to be invested in Treasury securities.

The agency's real estate managers are TCW Realty Advisors, Los Angeles, JMB Institutional Realty, Chicago and The RREEF Funds, San Francisco.

The assets mix, as of Sept. 30, was 30% stocks, 45% bonds, 10% cash equivalents, 3% real estate, and 12% in receivables. The agency had an estimated annual rate of return of 15.2%.

State Street Bank is the master trustee.

Kevin W. Putt is deputy executive director for resource management; Jay A. Jupiter is manager-investment management division; and Julie H. Shriver is senior investment adviser. ■

Dedicated or immunized bond funds
($ millions)

Fund	Assets
Teamsters, Western Conference	$2,552
Ameritech	2,400
Minnesota State Board	2,000
Chrysler Corp.	1,930
Bethlehem Steel Corp.	1,327
United Mine Workers	1,080
General Electric Co.	1,078
U S WEST	1,054
Allied-Signal Inc.	1,000
International Harvester Co.	900
Caterpillar Tractor Co.	890
American Airlines	850
Chevron Corp.	593
R.J. Reynolds	487
McDermott International Inc.	468
RCA Corp.	400
Armco Inc.	394
Chicago Municipal Employees	370
Inland Steel Co.	328
PPG Industries Inc.	313
Ford Motor Co.	300
Honeywell Inc.	300
Raytheon	233
American Can Co.	200
Hercules Inc.	184
Milwaukee City Employees	175
Southern Co. Services Inc.	150
Ohio State Teachers System	140
Intl. Union of Oper. Eng.	119
Cooper Industries Inc.	100
Eli Lilly & Co.	100
Boilermakers & Blacksmiths	90
Dow Chemical Co.	90
FMC Corp.	76
North American Philips	75
Eaton Corp.	56
Dart & Kraft Inc.	47
Philip Morris	45
Tennessee Valley Authority	38
United Methodist	35
United Technologies Corp.	30
Texas Instruments	7
Total	**$23,004**

Cut transaction costs . . .

Continued from page 16

"(City National) is still our custodian and we still have some physical bonds there. Every time we sold a bond, we had to move it from here to there," said Ms. Netterville.

She said the switch will not only save about $50,000 annually, but also will enable the fund to do securities lending.

"City National is the participating bank and Chase is the agent bank in the institutional delivery system," said Ms. Netterville, adding the fund still deals with City National when it wants to buy or sell securities.

Douglas A. Kelly, director-pension investments at American Can Co., Greenwich, Conn., said the $1.01 billion pension fund began using discount brokers for some of its trades.

"What we did was identify a couple of 'discount brokers' and interviewed them and spent a few days with them on the floor of the exchange," he said. "We did the same thing with the brokers our managers use . . . We feel comfortable that they are not suffering," said Mr. Kelly.

He said the fund's managers were asked to direct 25% of their trading to a list of discount brokers.

"We feel that we don't want to tie the hands of our managers and we feel they do receive some value from their brokers," he said.

Transaction costs before discount brokers were used averaged 8 cents per share, while directed transactions to discount brokers have been about 3 cents per share. ■

Funds with indexed stocks
($ millions)

Fund	Assets
TIAA-CREF	$12,500
New York State Common Fund	6,751
AT&T	6,100
California Public Employees	5,000
N.Y.C. Retirement Systems	4,766
New York State Teachers	4,217
NYNEX Corp.	2,850
California State Teachers	2,000
Teamsters, Central States	1,936
Maryland State System	1,831
General Electric Co.	1,642
Ford Motor Co.	1,600
Minnesota State Board	1,600
Washington State Investment Board	1,594
Southwestern Bell Corp.	1,358
Exxon Corp.	1,326
E.I. du Pont de Nemours	1,215
Florida Dept. of Admin.	1,128
Bell Atlantic Corp.	1,000
Pennsylvania State Employees	998
Pennsylvania Public School	989
Virginia Supplemental System	891
Illinois Teachers	870
U S WEST	864
Deere & Co.	800
Sears, Roebuck & Co.	566
Ameritech	540
Arizona State System	523
Shell Oil Co.	432
GTE Corp.	430
Aluminum Co. of America	424
Illinois State Universities	373
General Foods Corp.	315
RCA Corp.	300
Trans World Airlines Inc.	300
United Methodist	296
Utah State Employees	260
Intl. Union of Oper. Eng.	232
Tennessee Valley Authority	230
Phillips Petroleum Co.	227
Sperry Corp.	222
World Bank	219
Allied-Signal Inc.	200
Cooper Industries Inc.	200
Presbyterian Church	190
Raytheon	190
Pacific Gas & Electric Co.	184
Goodyear Tire & Rubber Co.	175
United Technologies Corp.	175
Alabama Retirement Systems	174
Southern New England Telephone	173
Kentucky Retirement Systems	170
Florida Power & Light	153
Ohio Police & Firemen	150
Tenneco Inc.	149
Amoco Corp.	138
Hawaii Employees System	130
Eaton Corp.	125
Minnesota Mining & Mfg.	112
Prudential Insurance Co.	110
Owens-Illinois Inc.	104
Illinois Municipal Employees	100
I.A.M. National	99
San Francisco Employees	98
Mississippi Public Employees	95
Armco Inc.	89
Sun Co. Inc.	81
R.J. Reynolds	72
Dow Chemical Co.	63
K mart Corp.	41
Philip Morris	35
Chicago Municipal Employees	29
Hercules Inc.	28
Citicorp.	20
Travelers Insurance Co.	20
J.C. Penney Co. Inc.	18
Getty Oil	12
Total	**$75,617**

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Stock-picking managers beat S&P

By Richard J. Gillespie

Performance results for a sample of 265 money managers show, on stock-picking abilities alone, they beat the Standard and Poor's 500 stock index in 1985.

The figures compiled by CDA Investment Technologies, Silver Spring, Md., show the managers, with combined assets of $270 billion, returned an average of 33.2% for the year.

The Standard & Poor's 500 was up 31.6% for 1985, including dividends. The Dow Jones Industrial Average, which comprises the stocks of 30 leading industrial companies, returned an estimated 33.6%.

The CDA figures do not give the actual investment results of the firm's surveyed, however. They only reveal the total return on the equity component of equity portfolios, and exclude the cash and fixed-income components.

Also, because equity holdings are derived from the 13(f) forms filed quarterly with the Securities and Exchange Commission, the figures do not account for any trading that might have occurred during the quarter, according to Spero Kripotos, executive vice president of CDA.

But on this basis, the top-performing firm in 1985 was Integrated Asset Management, New York, with a total return of 68.6%.

Dorothy Berry, executive vice president and chief operating officer, said the firm's average account was actually up in the "high 30s" for the year.

She said the difference arose because the firm had between 20% and 25% in cash and another 10% in fixed income.

"I will say that we were picking the right stocks," commented Ms. Berry. She added there is still cause for celebrating because "most clients are thrilled to get anything over 30% a year."

The firm's biggest equity gainer was **RCA Corp.**, which was taken over by General Electric Co. in December in an all-cash transaction valued at $66.50 per share.

The second-highest performing equity manager for 1985, with a return listed by CDA of 53.9%, was National Investment Services of America, Milwaukee, a firm previously known for its fixed-income management.

NISA's portfolio actually returned about 53.7%, said Eugene Martin, executive vice president.

But Mr. Martin said he is more concerned with the firm's long-term performance, which he said is seven years.

In 1985, NISA stayed with the same equity strategy it had followed during the past three years, said Mr. Martin, targeting consumer and services industries.

"The names that did the job for us last year were the names we have held for the past two and three years," he said. He mentioned **American Family Corp.**, **Cray Research**, **Dreyfus Corp.**, **Green Tree Acceptance**, **Liz Claiborne**, **La Petite Academy** and **The Limited Inc.**

NISA has yet to switch strategies, he said, adding that holdings are under review.

CDA said its third-ranked performer, W.P. Stewart & Co. Inc., New York, returned 51.1%. Bob Schwartz, a spokesman, would neither confirm nor deny whether CDA's numbers are accurate.

Close behind, at 50.5%, was GAMCO Investors Inc., New York.

"Our performance was good, but not that good," said Douglas R. Jamieson, a vice president.

The firm seeks companies that are likely takeover candidates, or that might be taken private, he said.

The firm also invests in convertible securities and this, coupled with other cash flows, produced returns more in the mid-to-high 30s, he said.

GAMCO was also the top performer in the three-year period. Its big plays of 1985 were **Storer Communications Inc.**, **Transway International Corp.**, **GenCorp** and **Gulf & Western Industries Inc.**

The company also had holdings in **ACF Industries Inc.** and **Wometco Enterprises Inc.**

For 1986, the firm likes **GenCorp**, **Rollins Communications**, **Iroquois Brands** and companies in the automotive after-market like **Echlin Inc.** and **Modine Manufacturing Co.**, said Mr. Jamieson.

According to CDA, GAMCO Investors' equity portfolio returned 144.6% on a quarter-by-quarter basis, a compound annual rate of 34.7% for three years.

Over the three-year period, CDA's sample of 162 managers averaged a total return of 66.8%, or 18.6% on an annual compound basis, compared with 19.6% for the S&P 500.

For the three years, Ruane Cunniff & Co. was second, with a compound annualized turn of 34%; and Shufro Rose & Ehrman was third, with about 30% compounded annually.

Edward Shufro, a partner, said the firm's 1985 performance probably was different because they had a larger cash position and more fixed income for the year, therefore, the figures were distorted.

In early January, he had not yet calculated the average account increase for 1985, he said.

The firm's largest holding in 1985 was **Union Carbide Corp.**, a firm whose share price doubled as the result of takeover activity from GAF Corp. ■

Equity-only returns of money managers*

Manager	No. of stocks	9/30/85 Portfolio value ($ mil.)	1985 returns %
Integrated Asset Mgmt.	51	58	68.6
National Investment Service/Amer.	44	81	53.9
W.P. Stewart & Co. Inc.	42	235	51.1
Gamco Investors Inc.	59	472	50.5
Gray Seifert & Company	108	230	49.8
Southeastern Asset Mgmt.	59	346	48.9
R. Meeder & Assoc. Mgmt.	57	78	48.1
Newbolds Asset Management	53	638	48.0
Towneley Capital Mgmt.	49	236	45.1
Shufro Rose & Ehrman	123	556	44.9
Dreman & Embry Inc.	74	523	44.6
Friess Associates Inc.	57	186	44.4
Harris Associates Inc.	309	1121	43.4
Ruane Cunniff & Co.	104	801	42.9
Institutional Capital Co.	39	512	42.8
First Manhattan Co.	492	2298	42.6
Gofen & Glossberg Inc.	147	178	42.6
Tweedy Browne Inc.	81	301	42.5
Reich & Tang Inc.	73	700	42.5
George D. Bjurman & Assoc.	48	40	42.1

*The top 20 managers by 13F filings as reproduced by CDA Investment Technologies, Silver Spring, Md. Figures do not represent real investment returns.

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Pensions		
Lotteries		
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Late news

Continued from page 3

One quarter of the 160 million shares will be offered to the public.

Coldwell chiefs quit

LOS ANGELES — Coldwell Banker Capital Management Services, with about $800 million under management, has lost its top property investment personnel. Reed Samuelson, president; Scott Calder, acquisitions; Gary Neumeier, portfolio management; and others have joined T. Rowe Price Realty Advisers Inc., Los Angeles.

Late money movers

• FAIRFIELD, Conn. — The $2 billion Common Fund tapped Aronson & Fogler Investment Management, Philadelphia, to run a $10 million account for its 11-manager equity commingled fund.

• BALTIMORE — The $150 million Alexander & Alexander Inc. pension plan hired its first overseas manager, Alliance Capital Management International Inc., London, to manage a $10 million balanced international account.

Funds lose $8 billion . . .

Continued from page 3

period. The median portfolio returned -2%; the third quartile -2.5%.

The market losses were broad; nine of the 10 industry sectors of the S&P 500 reported negative returns.

Despite the loss, pension fund executives were not alarmed.

"This particular drop won't motivate us to do anything different," said James J. Biundo, director-trust investment management, U S WEST Inc., Englewood, Colo.

He estimated the fund's equities declined 2% to 2.5% — about $80 million to $90 million — in the first 10 days of January. U S WEST has about 60% of its more than $5.6 billion pension fund in domestic stocks.

At Honeywell Inc., Minneapolis, Robert T. Mall, vice president-pension investment, said, "I'm not worried about that in that short period."

Honeywell's specific results weren't immediately available, though Mr. Mall said the fund has about 40% of its roughly $1.6 billion in pension assets in U.S. stocks, an equity allocation slightly less than the average Top 200 fund.

"We're investing for the long term," Mr. Mall added. "There are going to be these short-term fluctuations. We've committed ourselves to being in equities."

Even smaller funds, such as Associated Dry Goods Corp., New York, with $165 million in pension assets, were affected by the market change.

Theodore Babcock, assistant treasurer, said of its fund's equity return in January, "I would think it would be negative, like everyone else's."

In the 10-day January period, the S&P 500 recorded the steepest loss of the broad market indexes, though they all registered losses.

In the 10 days, the Wilshire 5000 returned -1.96%; Value Line, -1.96%; and NASDAQ over-the-counter composite, -0.24%.

The Dow Jones industrial average fell 2.14%, including its steepest single day fall in points (39.1), though in percentage terms (-2.5%) the drop wasn't its largest. The early January market downturn came after a sharp fourth quarter rally in which the S&P 500 rose 17.12%.

The Top 200 funds' aggregate January loss was extrapolated, assuming S&P 500 returns, from *Pensions & Investment Age's* statistics as of Sept. 30, when it was reported their equity portfolios totaled $270 billion, or 41.5%, of their $648.5 billion in assets.

In the rally of the fourth quarter, ended Dec. 31, the equity portfolios reached an estimated $316 billion, increasing by $46 billion, or the equivalent of the 17.12% total return of the S&P 500, including reinvestment of dividends.

But in the first 10 days of January, the portfolios fell in value to an estimated $308 billion, dropping 2.45%, or equal to the loss in the S&P.

The equity portfolios of the 115 largest corporate funds showed a little more fluctuation in value since the beginning of the fourth quarter, based on similar estimates.

As of Sept. 30, the 115 reported equities totaling $186 billion, or 48.5%, of their $383 billion in assets. In the fourth quarter, their equities rose an 17.12% to $218 billion. But from Jan. 1 to 10, their equities dropped to $212 billion.

Their estimated $6 billion loss means they gave up in 10 days about 19% of the $32 billion they gained in the last three months of 1985.

Each fund's returns would depend on its percentage of assets allocated to equities and its particular stock holdings.

According to INDATA, of the S&P 500's 10 industry sectors, only energy had a positive return, a slight 0.2%.

Index funds, of course, would have fallen in line with the S&P 500 — losing about $2.2 billion in the first third of January.

As of Sept. 30, the Top 200 reported having $75.6 billion in indexed funds, generally all tied to the S&P 500. Those assets increased to $88.5 billion as of Dec. 31, but in January, fell to about $86 billion. ■

Are debt deals in trouble? . . .

Continued from page 5

agement Co., Newport Beach, Calif., said: "There are certainly enough examples to say there is trouble in 'junk bond city.' That's the impression we've drawn."

He said the problems with TWA, Beatrice and others represent a broad uneasiness with junk bonds by potential investors.

He said such recent junk bond issues, such as KKR's Storer financing, give a deceptive picture of the market. The Storer bonds, although sold in December, were part of a financing arranged in summer.

Mr. Gross predicted a drop in the amount of junk bond financings, and the use of less leverage, more equity and more bank financing in takeovers.

As further evidence of a general rejection of junk bonds, he cited the

the spread in prices between junk bonds and high-quality corporate bonds and government securities.

AIM's Mr. Crum said the spread on yields between junk bonds and Treasury securities is its widest of the past five years, in excess of 500 basis points.

Gerald Unterman, vice president, Solomon Asset Management, New York, takes a narrower view on the financing trouble.

"I think it's peculiar to these situations and the fundamentals of these companies involved," he said.

With MGM/UA, he said, "The price bid originally by Ted Turner was a very rich price."

Turner, who early in 1985 failed in his attempt to buy CBS Inc., hasn't completed his proposed takeover of MGM/UA. Drexel Burnham Lambert is helping to ar-

Plan surplus could . . .

Continued from page 3

said E.W. Tregre, public information manager for New Orleans Public Service.

Mr. Tregre said the company brought suit against the council seeking the rate increase.

"Originally, the lower courts ruled that federal jurisdiction did not apply in this case," he said. However, the company contends federal jurisdiction does apply since the case involves wholesale rates established by the Federal Energy Regulatory Commission.

The company appealed the ruling to the 5th U.S. Circuit Court of Appeals and is awaiting the ruling of that court.

According to testimony given at a Sept. 5 public hearing on alternatives to a rate increase, Richard Camus, the actuary, suggested the company terminate its pension plan and recapture an estimated $45 million in surplus assets.

Mr. Camus could not be reached for comment.

Mr. Tregre said the plan termination is not a viable alternative.

"(The council) told us as part of the proceedings to look at those funds, but how can we look at those funds if there are no excess assets," said Mr. Tregre.

"Our position is that our pension fund is only adequately funded. We are strongly opposed to using those assets in any way that would alter that funding," he said.

Councilman Bryan Wagner does not agree with the company's assessment of the plan's funding.

"In the opinion of myself and the city's actuary, we feel they are overfunded," he said.

The exact status of the company's pension plan is somewhat vague. Mr. Tregre said the company does not have an exact accounting of the fund's assets because of the spinoff of 1,200 employees to the Regional Transit Authority in July 1983, a process still not completed. An undetermined amount of the assets of the pension plan are being transferred to the RTA, he said.

Ronald L. Haneberg, a consulting actuary with Buck Consultants Inc., Dallas, and actuary for the Middle South system, said New Orleans Public Service plan, after the transfer of assets to the RTA, has about $100 million in total assets.

At the public hearing, Mr. Haneberg, serving as the company's witness, did confirm the presence of excess assets in the pension plan, but did not give an amount.

"If the plan were terminated today (Sept. 5) there would be excess assets," he said.

Contacted later, Mr. Haneberg said Mr. Camus' estimate was overly generous, but he would not pinpoint the amount of the surplus.

He said the proposal to terminate the plan would not eliminate the need for a rate increase later.

"(Recapturing the assets) is really more of the plan making a loan that would eventually have to be repaid," said Mr. Haneberg. "The City Council is saying we don't want to do anything for you now so you'll have to get by on a temporary basis and here is where you can get some funds."

The utility's Mr. Tregre said one possible obstacle to recovering the assets is that until 1983, employees had contributed to the pension plan. If a reversion results from a termination, the employees are entitled to share in the reversion above the amount of their accrued benefits, he said.

He said the company stands firm in its belief that plan assets belong to the employees.

"They were contributions approved by the regulatory bodies and they, too, would belong to the employees," said Mr. Tregre.

Although Mr. Wagner wants the company to use the pension assets instead of seeking a rate increase, he said the assets belong to the employees.

"The sole purpose of a pension plan is to function for the sole purpose of the people involved in it and that could mean keeping their jobs," said Mr. Wagner.

Mr. Wagner said the council does not intend to force the company into terminating its pension plan.

"The alternative would be to not put the money into their plan. That's what they did this year," said Mr. Wagner.

Mr. Tregre said the company did not make a contribution to the pension plan in 1985 and probably will not do so in 1986.

Mr. Haneberg said during the hearing he had changed the plan's interest assumption to 9% from 7%, making the contributions for plan years 1984 and 1985 unnecessary.

He said later the company's funding method also was changed, which brought the pension plan into a fully funded status.

In his testimony, Mr. Haneberg, said the $6 million would not need to be contributed, but he said the amount should not be considered additional revenue.

"The only comment I made before and I will again is that the amount that would have had to have been paid (is) not money coming in, it's saving money going out," said Mr. Haneberg.

Mr. Tregre said the council and the company are at odds over the way the pension assets should be handled. ■

4th-quarter shifts decide . . .

Continued from page 5

agement group came in third for the year in terms of assets gained, with slightly more than $1.4 billion. It also was third in the quarter, with $535 million.

The largest new account reported for the firm in the fourth quarter was a $400 million stock index fund for the Pennsylvania Public Employees' Retirement Association. A major account reported earlier in the year was a $750 million stock index fund for the Central States Teamsters.

Bankers Trust had 15 new accounts reported during the year, making it second to The Boston Co., which had 17. Bankers Trust's new accounts included master trustee relationships as well as discretionary investment management accounts.

Wells Fargo Investment Advisors had nearly $1.37 billion in new assets under management reported during the year, making it fourth. The total for the year includes $135 million reported in the fourth quarter, when it did not rank in the top 10.

The biggest account reported in the fourth quarter was a $65 million bond index fund for the Chicago Policemen's Annuity & Benefit Fund. Major accounts reported earlier in the year included a $1 billion index fund for the California State Teachers' Retirement System.

J.P. Morgan Investment Management Inc., New York, was sixth for the year in terms of new assets reported, with $986 million, and seventh for the fourth quarter, with $356 million.

The largest account reported for J.P. Morgan in the fourth quarter was a $200 million stock index fund for the Pennsylvania Public Employees' system. The most signifi-

year was a $600 million active fixed-income portfolio for the Iowa Public Employees' Retirement System.

Duff & Phelps Investment Management Co., Cleveland, was seventh for the year in terms of new assets, with $878 million, and fifth in the fourth quarter, with a $400 million balanced account for the Louisiana Employees' Retirement System. Other accounts reported for the firm in 1985 were in bonds.

Kohlberg Kravis Roberts & Co., New York, a leveraged buy-out firm, was eighth for the year and fourth for the quarter with $525 million in commitments from the Washington State Board of Investment, Oregon Public Employees' Retirement System, Wisconsin Investment Board and Minnesota State Board of Investment.

Richard Ellis Inc., the New York-based real estate firm, was ninth for the year with a new $500 million account for Royal Dutch Shell's pension fund reported during the second quarter. The firm had no new accounts reported in other quarters.

Neuberger & Berman, New York, placed 10th for the year in terms of new assets, with $379 million, and also 10th for the quarter, with $155.5 million. The largest of three accounts reported in the quarter was a $130 million short-term fixed-income portfolio for PPG Industries Inc., Pittsburgh. Other large accounts reported during the year included a $114 million fixed-income account for the W.K. Kellogg Foundation, Battle Creek, Mich.

The Boston Co., Boston, was one of two firms placing in the Top 10 for the quarter but not for the full year. It ranked ninth in the quarter with $171.8 million, including a $150 million balanced account for the

First Kentucky Co., Louisville, ranked eighth in the quarter with a fixed income account of between $200 million and $250 million for the Kentucky Teachers' Retirement System. That was its only new account reported all year.

The Boston Co.'s 17 new accounts reported in the year included four in the fourth quarter. Besides The Boston Co., Bankers Trust and Mellon Capital, top gainers of accounts for the year were Trinity Investment Management Corp. and State Street Bank & Trust Co., both of Boston, each with 12.

Top account gainers for the fourth quarter were Mellon Bank, Pittsburgh, with seven master trust or custodial accounts; State Street Bank, with six accounts, mostly master trust or custodial; Investment Advisers, with five; and Heitman Advisory Corp., Chicago, with five. Ten firms had four new accounts reported in the quarter.

Firms that lost significant accounts in the year or quarter included Favia, Hill, with the loss of the New York public funds' accounts; Scudder, Stevens and Loomis, Sayles, with the loss of the West Virginia accounts; MacKay-Shields Financial Corp., New York; and The Griffin Group, Chicago.

Two firms were both winners and losers in the race for assets to manage. The Boston Co. had its fixed-income allocation from the Iowa public employees' system reduced to $700 million from $1.8 billion. At the same time, the firm had more new accounts reported than any other.

Alliance Capital Management Corp., New York, had several large accounts pulled during the year, including a $300 million balanced portfolio for the Kentucky Teachers' Retirement System and a $100 million balanced account for Deere & Co., Moline, Ill.

At the same time, Alliance had eight new accounts and $187.5 million in new assets reported during

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Pensions & Investment Age

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$400 million liquidated by ARCO plans

By Steve Hemmerick

LOS ANGELES — Atlantic Richfield Co. has liquidated between $400 million and $450 million from its defined benefit plans to pay benefits to employees taking a lump-sum, early retirement option.

E. Kent Damon Jr., ARCO's vice president and investment officer, said the money came from equity and fixed-income portfolios, but more from bonds than from stocks.

Mr. Damon had wanted to liquidate more real estate and venture capital than he was able to, so fewer equity and fixed-income holdings would have been affected.

"I think the experience reinforces things that we probably tell ourselves, but don't often have to deal with, and that is there is value in having liquidity in the portfolio. Things like real estate and venture capital are illiquid," he said.

"It was difficult to take anything out of real estate or venture capital. We know (that these areas are illiquid), but we don't know it as clearly until we experienced it."

Mr. Damon said he could not provide dollar amounts taken from each asset class.

He said the new asset mix is 65% equity (including real estate and venture capital) and 35% fixed income. Before the partial liq-

Continued on page 43

Late news

Ex-California chief indicted

SACRAMENTO, Calif. — Gilbert W. Chilton, the former chairman of the California State Teachers' Retirement System, has been indicted by a federal grand jury on two counts of conspiracy and one count of interstate travel in aid of a bribery and extortion scheme, according to the U.S. attorney's office in Sacramento.

The indictment stems from what federal prosecutors called an organized scheme to

Continued on page 42

Bond managers' returns mixed

PBGC equity managers lag market

By Joel Chernoff

WASHINGTON — Six of the Pension Benefit Guaranty Corp.'s eight equity managers underperformed the market during the year ended Nov. 30, by margins ranging from 1.4 percentage points to 9.1 percentage points, *Pensions & Investment Age* has learned.

The remaining equity managers were hired after Nov. 30, 1984.

The PBGC's managers weren't alone; nearly 75% of stock managers trailed the Standard & Poor's 500 stock index during 1985, according to the Trust Universe Comparison Service.

In total, the PBGC's equity managers' portfolios returned 25.6% for the 12-month period ended Nov. 30, compared with 29.3% for the S&P. When cash holdings are subtracted, however, the managers returned 27%, the agency disclosed. The median equity manager in the Hamilton, Johnston & Co. Inc. universe returned 26.3% for the period.

The agency's two fixed-income managers fared better: Pacific Investment Management Co., Newport Beach, Calif., beat its bogey in 1985 while Morgan Stanley Asset Management Inc., New York, fell slightly behind.

Although the data obtained by *P&I Age* covers only a year, it does give an early indication of how well the PBGC is doing as an investor.

"I think it's a little early to tell," said John Hotchkis, partner in Hotchkis & Wiley, Los Angeles, and chairman of the PBGC Advisory Committee's investment panel.

"I think we should be satisfied," commented Jay Jupiter, manager of the PBGC's investment management division. He noted the PBGC had picked managers to protect the agency in down markets while still aiming to beat the S&P.

"I think that the managers we have will be able to outperform the S&P over a market cycle," he added.

Investment income by the PBGC helps offset the agency's mammoth $1.3 billion deficit. While the income is not expected to erase that obligation, every little bit helps.

What's more, performance data on individual managers provides a glimpse of how someone else's managers fared, and information on the buys and sells during October and November offers an unusual glimpse of how the managers went about their business.

The PBGC had discretionary investments of $930 million as of Nov. 30. Another $34 million was run by specialty managers.

Some $200 million from terminated plans whose assets were not yet in trusteeship, $41 million in trusteed assets managed by outside custodians, $66 million in insurance contracts, and $5 million run by the PBGC's custodian, State Street Bank of Boston, gave the agency a total of $1.28 billion in assets.

Of that, $486.8 million was in equity investments and $443.5 million in fixed-income portfolios.

Equity returns were dragged down by $44 million newly invested with real estate managers, which earned little or no returns, noted Mr. Jupiter. In addition, all returns are net of transaction costs and manager fees, thus making them appear somewhat lower than standard managers' reports.

The agency's investment strategy has undergone an overhaul in recent years, switching to a multimanager system that has placed a more conservative bias on equity investments.

Continued on page 37

2 consolidate funds after mergers

By Alan Krauss

R.J. Reynolds Industries Inc., Winston-Salem, N.C., has dropped 10 money managers following the merger of its pension assets with those of Nabisco Brands Inc.

Reynolds acquired Nabisco in September, and merged Nabisco's $516 million pension fund with Reynolds' $2 billion fund.

In a similar development, BASF Corp., Parsippany, N.J., is merging pension assets as part of an overall financial consolidation with its latest acquisition — American Enka Corp., Enka, N.C.

When American Enka is fully absorbed, BASF will have pension assets totaling about $425 million, according to Fred Bernthal, chief financial officer.

Gene A. Hoots, president of RJR Investment Management Inc., Reynolds' in-house investment subsidiary said, "In combining the pension funds of the two companies, we found that we had too many firms involved in managing the funds.

"We have selected firms that we feel will work well together managing our assets."

Equity managers dropped were: Alliance Capital Management Corp., Bankers Trust Co. — Investment Management Group, Forstmann-Leff Associates Inc., MacKay-Shields Financial Corp., all of New York; Hellman, Jordan Management Co. Inc., Boston; and McKenzie Walker Investment Management Inc., Larkspur, Calif.

Bond manager Fischer, Francis, Trees & Watts Inc., New York, was dropped, as were Bear, Stearns Asset Management Inc., New York, for options; and Prudential Asset Management Co. Inc., Newark, N.J. and The Travelers Cos., Hartford, Conn., for real estate.

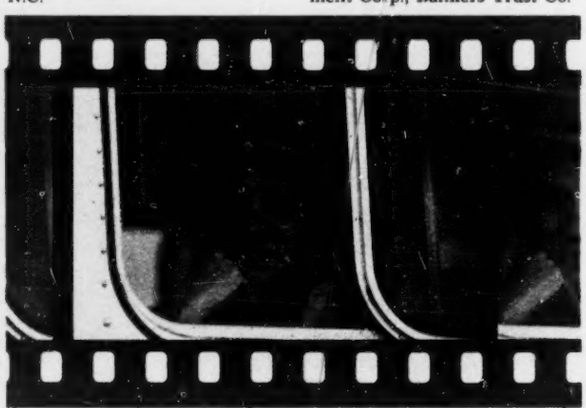
Mr. Hoots declined to give the amounts of assets the terminated firms had under management.

In the statement, Mr. Hoots said: "We want to stress that these managers performed well for RJR and Nabisco. They were not terminated because of their performance, but simply because we had too many managers with too many different management philosophies."

Most of the dropped managers were Nabisco's.

According to Mr. Hoots, the merger will not affect the asset allocation levels of the overall fund. As of Sept. 30, Reynolds reported its approximate asset mix as 62.7% equities, 28.1%

Continued on page 37



George M. Yaneff believes the skills he needs as a producer of movies, such as the critically acclaimed "Trip to Bountiful," aren't far removed from those he needs in the investment business.

Blue Cross sets up financing company

By Marci Baker

CHICAGO — The Blue Cross & Blue Shield Association, trying to amass greater financial clout has created a company to provide centralized financing and investment services to Blue Cross & Blue Shield plans nationwide.

Officials of the new company, Health Plans Capital Services Corp., are attempting to raise base capital through a private placement offering to the individual Blue Cross plans, said David Murdoch, Capital Services' president and chief executive officer.

The idea behind Capital Services is to take advantage of the greater financing flexibility and

Corporate finance

As smaller individual health insurers, Blue Cross plans often are limited primarily to more expensive bank loans for their capital raising needs. The public or private placement debt markets can be prohibitively expensive because from pooling resources.

Individually, the roughly 85 Blue Cross plans, which operate as independent insurance companies, range in size from the very small to the very large. Together they have investment assets in general accounts that exceed $10 billion, Mr. Murdoch said. Total premiums for the group as a whole exceed $40 billion.

Clark Equipment starts leveraged ESOP for workers

By Barry B. Burr

SOUTH BEND, Ind. — Clark Equipment Co. has set up a leveraged employee stock ownership plan that offsets the funding of its defined benefit plan and provides the company with its biggest source of corporate financing — $85 million — since 1974.

In effect, Clark will use the ESOP to pay for some or all of the benefits promised under the defined benefit plan. Only if the value of the stock in the ESOP is unable to finance the promised benefit will the benefit be paid from the defined benefit plan.

Thomas L. Doepker, Clark's vice president and treasurer, said Clark blended the ESOP with the defined benefit plan in large part because the company wants to have more of its stock in the hands of its employees.

(In a defined benefit plan, companies are prohibited by the Employee Retirement Income Security Act from putting more than 10% of plan assets in company stock; no such restrictions exist in an ESOP.)

With about $300 million in pension assets, Clark could contribute — at most under ERISA — about $30 million of its stock to the plan, Mr. Doepker noted. Through the ESOP, he said, Clark can fund the plan with $85 million of stock.

Some experts said Clark's move raises a number of pension regulatory issues, even though they said a few companies have set up similar integrated funding programs.

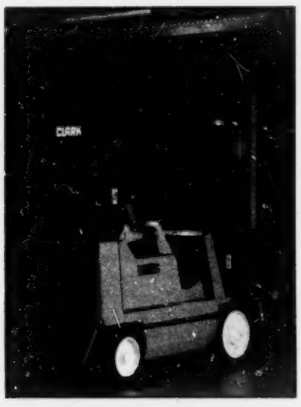
"You end up with an issue of whether the ESOP qualifies as an ESOP when it's integrated with the defined benefit plan," said Roger C. Siske, partner in the Chicago law firm of Sonnenschein, Carlin, Nath & Rosenthal.

"There are a number of questions on whether it meets all ERISA rules."

He added, "Is the ESOP really an ESOP when it's in this relationship?"

John Hoos, partner and manager of the legal group at Hewitt Associates, Lincolnshire, Ill., said generally, "the ESOP is funding the pension promise."

If Clark's stock falls sharply, he said, the Pension Benefit Guaranty Corp. is "going to be concerned about how much in assets are left in the defined benefit plan."



Although unfamiliar with the Clark program, Mr. Hoos added, "We think it's a viable concept in certain situations. As with anything, there are certain issues involved."

Officials from the Department of Labor and the PBGC were unavailable for comment.

Michael Hanesworth, Clark's general labor counsel, said Clark expects to receive Internal Revenue Service qualification of the ESOP and its integration with the funding of the defined benefit plan.

"The defined benefit plan

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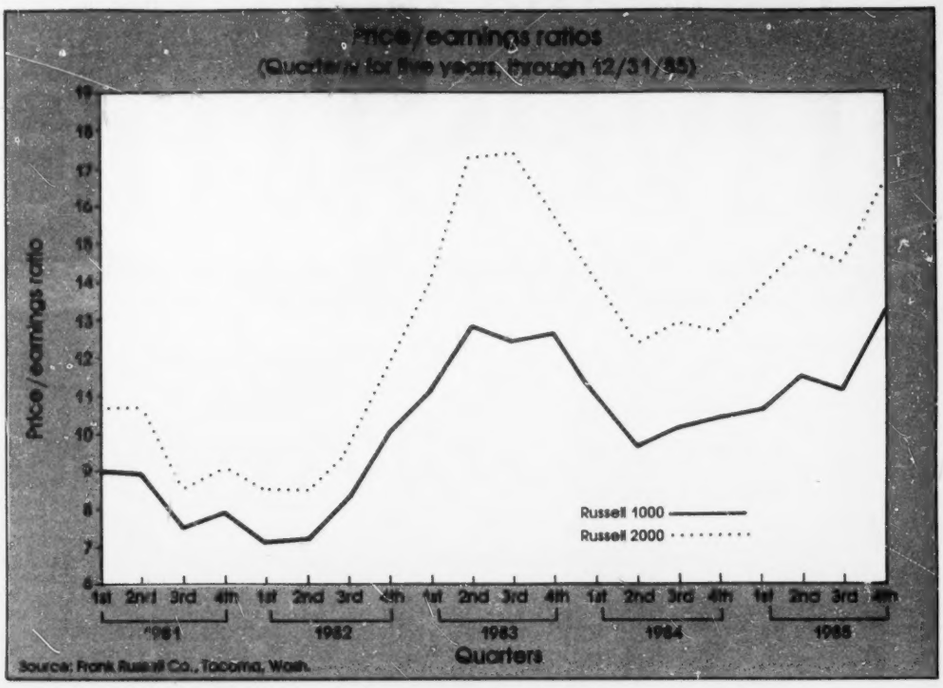

Market may be near its peak

Low p/e opportunities wane

By Lauren Picker

Many value-oriented money managers are finding slim pickings in the stock market, indicating the market might be nearing its peak.

Opportunities still exist, but are harder to find, according to managers surveyed in late January by *Pensions & Investment Age*.

"We're in the eighth or ninth inning of the ball game," said Derwood Chase, president and chief investment officer of Chase Investment Counsel Corp., Charlottesville, Va.

Most companies with low price-earnings ratios "represent some sort of problem company with very erratic earnings," and "don't have the large growth we're looking for," Mr. Chase said.

Although he believes there's "quite a bit of risk in this market," he also suspects "the party isn't over yet."

Indeed, many value managers are approaching the market with a curious blend of caution and confidence. Most believe promising issues exist, but are difficult to identify.

"The market's pretty well picked over," said Charles Clough, chief investment strategist at Collin & Co., Boston. "There are not a lot of things that are really screaming buys right now.

"A low p/e manager today has opportunities. On the surface, opportunities seem to be limited, but what he'd have to do is look in specific industries where earnings are extremely depressed right now.

"What a valuation or contrarian or low p/e manager has to do is basically bet that, in the future, a lot of this will improve."

Continued on page 43

Sale-leaseback cuts costs

By Steve Hemmerick

BUTTE, Mont. — Montana Power Co. cut the cost of its debt and lowered the cost of its energy in a sale-leaseback leveraged by selling $217 million in secured notes to investors such as the Harvard University Endowment and Cummins Engine Co. pension fund.

The leveraged sale-leaseback was for Montana Power's interest in a new coal-fired electric generating plant. Pension money also was invested through Morgan Guaranty Trust Co.

Perry Cole, manager of budget and financial planning for Montana Power, said he could not give an estimate on the exact savings the company will realize, adding it depends on the accounting methods used.

The notes pay an average of 12.6% interest.

Mr. Cole said the deal, which was put together in September but not executed until December, has "turned out well for everybody." He projected the deal would cut the cost of the company's power to just more than 4 cents per kilowatt hour from 5½ cents.

But the situation didn't look as good some months back, according to Mr. Cole.

He said the utility owned 30% interest in a generating plant, Colstrip Unit 4, that is expected to begin commercial operation in April. The plant produces 700

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Continental Steel seeks termination

By Trudy Ring
and Joel Chernoff

KOKOMO, Ind. — Continental Steel Corp. wants to use bankruptcy proceedings to terminate two pension plans underfunded by an estimated $49 million.

The steel company also is seeking to recover $2.8 million in contributions made to the plans in September. It had received funding waivers totaling about $27.5 million for its pension plans for five consecutive plan years, 1980 through 1984.

The Pension Benefit Guaranty Corp., which would become responsible for the pension plans if they are terminated, is opposing Continental's petitions. The agency opposes terminating plans through the courts, rather than through the procedures prescribed by the Employee Retirement Income Security Act.

"Our legal staff feels that the PBGC's position will be upheld," said Kathleen P. Utgoff, executive director.

In a separate discussion regarding taking the agency private, Ms. Utgoff charged the termination program for single-employer plans is turning into a vast subsidy program for inefficent industries, particularly the steel industry.

"We have now given or are going to give something like $1 billion to the steel industry," she said. "We're keeping a lot of inefficient steel companies, we're allowing them to compete, to spread out fixed costs, to have higher prices, for just very bizarre reasons.

"To give money to the steel industry because (a company has) an underfunded pension plan doesn't seem to me to achieve any of the objectives you might have as either national economic objectives, as retirement objectives or as steel objectives."

A termination by Continental

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SCORECARD

Illustration by Jim Flynn

Managers win top spots with passive products

By Ed Christman

For the second straight year, pension funds and other tax-exempt investors poured money into passive products, helping money managers specializing in passive investing snare more than half of the $83.4 billion net new business in 1985.

Of the $43.2 billion in net new business reported to *Pensions & Investment Age's* second annual Scorecard survey, $18.4 billion was for guaranteed investment contracts and other annuity products offered by insurance companies; $17.1 billion, equity indexing; $6 billion, dedications and immunizations; and $1.7 billion, fixed-income indexing.

In addition, managers offering passive investments garnered nine of the Top 10 spots for net dollar gain in business.

Interest in passive investments parallels the growth of defined contribution plans, the increase in pension plan terminations resulting in the purchase of annuities to cover vested benefits and the inability of many active money managers to outperform the markets.

Overall, managers responding to the Scorecard survey reported about $100 billion in new business and $17 billion in business lost, resulting in a net gain of $83 billion.

Of the total gain, about $67 billion was from 5,321 new clients, while $33 billion was additional money from existing clients.

Managers were asked to report net business gain for Jan. 1 to Dec. 1, 1985. Of the 301 responding, 56 were eliminated because they did not, as requested, supply new client names.

Those breaking out their net gain by investment vehicle reported $32.5 billion in equities; $17.9 billion, fixed income; $4.9 billion, balanced accounts; $4.8 billion, equity real estate; $266 million, mortages; $16.9 billion, GICs; and $6.2 billion, other categories.

Wells Fargo Investment Advisors, San Francisco, which offers mostly indexing products, handily gained the most net new business — almost $10.5 billion.

Of that, $8.7 billion was for equities, including $8.5 billion for indexing; $507 million was for fixed income, including $476 million for indexing and $31 million for dedicating and immunizing; $493 million was for balanced accounts; and $805 million was for hedged-core portfolio insurance.

Wells Fargo's new clients include Allied Stores Corp., New York; American Standard Inc., New York; California State Teachers' Retirement System, Sacramento; General Electric Co., Stamford, Conn.; New York State Common Retirement Fund, New York; NYNEX Corp., New York; and Vanderbilt University, Nashville, Tenn.

Mellon Capital Management, another San Francisco money manager specializing in index funds, was No. 2, with a net gain of $5.9 billion worth of new business.

Of that, $5.475 billion was for equities, including $2.784 billion in indexing; $425 million was for asset allocation, a balanced passive portfolio.

New clients include Bell Atlantic Corp., Philadelphia; Caterpillar Tractor Co., Peoria, Ill.; Central States Teamsters, Chicago; Mayo Foundation, Rochester, Minn.; U S WEST Inc., Englewood, Colo.

Prudential Asset Management Co. Inc., Newark, N.J., was third, with $5.7 billion, of which $4.3 billion was for GICs and other general account annuity products.

For those products, new clients include Ameritech Technologies, Chicago; Conoco Inc., Wilmington, Del.; NYNEX; and Pan American World Airways Inc., New York.

Prudential also reported a net gain of $550 million for equities; $682 million, fixed income; $121 million, balanced accounts; $57 million, equity real estate; and $15 million, non-U.S. markets.

New real estate clients were A.H. Robins Co., Richmond, Va.; Daniel International Corp., Greenville, S.C.; and the Illinois Municipal Retirement Fund, Chicago.

The only Top 10 manager not specializing in passive products was Leland O'Brien Rubinstein Associates Inc., Los Angeles, which does dynamic risk hedging to provide protective portfolio management. The firm's net gain in business was $2.8 billion, largely from new clients including Mead Corp., Dayton, Ohio; and Southern California Rapid Transit District, Los Angeles.

Six of the managers with assets of more than $1 billion made repeat showings in the Top 10: Metropolitan Life Insurance Co., New York, which was top in 1984; Wells Fargo, second place for that year; State Street Bank & Trust Co., Boston, fourth; Aetna Life and Casualty Co., Hartford, Conn., sixth; Prudential Asset Management, eighth; and Mellon Capital, 10th.

The four new Top 10 managers are J.P. Morgan Investment Management Inc., New York, ranked fifth; Leland O'Brien Rubinstein, ranked sixth; Bankers Trust, New York, ninth; John Hancock Finan-

Continued on page 38

GICs firms surge ahead

Move to defined contribution plans cited

Insurance company general account products had a banner year because sponsors' increased use of defined contribution plans.

Plan sponsors bought $16.9 billion in guaranteed investment contracts and other general account products, according to *Pensions & Investment Age's* second annual Scorecard.

Meanwhile, balanced managers reported a net gain in assets of about $5 billion.

Among firms offering GICs and other general account products, Prudential Asset Management Group, Newark, N.J., catapulted to the top spot of the Top 10 rankings, with $4.3 billion in net sales.

Prudential overtook Metropolitan Life Insurance Co., New York, the leader in last year's Scorecard in that category. In 1985, Metropolitan had net sales of $3.8 billion, down from the $4.9 billion it reported in the previous survey.

Aetna Life & Casualty Co., Hartford, Conn., climbed into third place this year, with $2.073 billion in net business. Of that, more than $1.3 billion was for GICs, $573.3 million was for general account products and $171.5 million was for annuity closeouts.

Business generated by the Top 10 in GICs and general account products totaled $16.2 billion.

Prudential and Aetna both showed a gain in net new business between 1984 and 1985. Prudential reported $2.4 billion in net gain in those products in 1984, almost $2 billion less than

Continued on page 36

Net dollar gain

Top 10 managers over $1 billion

Companies	$ mils.
Wells Fargo Investment, San Francisco	10,455.0
Mellon Capital Mgmt., San Francisco	5,900.0
Prudential Asset Mgmt., Newark, N.J.	5,723.0
Metropolitan Life Ins. Co., New York	4,151.0
J.P. Morgan Mgmt., New York	3,284.0
Leland O'Brien Rubinstein, Los Angeles	2,821.0
State Street Bank, Boston	2,813.0
Aetna Life & Casualty, Hartford, Conn.	2,764.0
Bankers Trust-Invest. Mgmt., New York	2,123.9
John Hancock Financial, Boston	1,775.3

Top 10 managers $250 mil. to $1 bil.

Companies	$ mils.
Brignoli, Curley & Roberts, New York	457.0
Pilgrim, Baxter, Hoyt & Greig, Wayne, Pa.	444.0
TCW Realty Advisors, Los Angeles	430.9
Primco Capital Mgmt., Louisville, Ky.	400.0
Dreman & Embry, New York	320.6
Donald Smith & Co., Paramus, N.J.	303.6
Pacific Financial, Beverly Hills, Calif.	273.5
Lowe, Brockenbrough, Richmond, Va.	270.0
Jones Lang Wootton Realty, New York	250.0
Morley Capital Mgmt., Lake Oswego, Ore.	214.0

Top 10 managers under $250 million

Companies	$ mils.
Magten Asset Mgmt., New York	149.0
Hahn, Holland & Grossman, Chicago	117.0
Eagle Asset Mgmt., St. Petersburg, Fla.	109.0
Tukman Capital Mgmt., Larkspur, Calif.	100.0
John McStay Investment, Dallas	90.0
Julius Baer Investment, New York	85.0
Mortgage Investors Group, Detroit	85.0
Kurtz Capital Mgmt., Livingston, N.J.	78.0
Crabbe-Huson Co., Portland, Ore.	73.8
Arnhold & S. Bleichroeder Intl., New York	70.0

Wells Fargo is tops in equity

Indexing continues its domination

Ed Christman

For the second straight year, index managers dominated the equity new business marketplace, snaring $16.5 billion, or slightly more than half, of the $32.5 billion net gain in business reported by equity managers.

Five of this year's Top 10 managers in *Pensions & Investment Age's* Scorecard can credit their rankings to their index business. The Top 5 managers generated a net gain in equity business of $18 billion of which $15.4 billion, or 85.5%, was for indexed management.

Last year, four index managers made the rankings, but the success enjoyed by those managers was not as significant as in 1985.

Last year's leader, Wells Fargo Investment Advisors, San Francisco, once again emerged as the top equity manager, chalking up a net gain of $8.65 billion, of which $8.54 billion was for indexing. Last year, Wells Fargo's net gain was $2.8 billion.

Frederick L.A. Grauer, president of Wells Fargo, attributed the net gain this year to size and tracking ability.

In indexed management, Mr. Grauer noted, the firm gets better as it gets bigger, which often is not the case in active management.

And the firm's size results in minimal execution cost, which helps performance, he said.

The shift to indexed management by tax-exempt institutional funds has been spurred by weak performance by active managers during the past few years.

"1985 is turning out to be a year when active managers have again not done well," he said.

Mellon Capital Management, San Francisco, once again came in second, with a $5.5 billion net gain in business, compared with about $1.5 billion last year.

Of the $5.5 billion, $2.7 billion was for the Standard & Poor's 500 stock index, with the rest in other indexed products and core equity strategies.

"In general, there has been an extraordinary increasing interest in core management, asset allocation and quantitatively driven passive strategies, which is the reason why our business has increased so much," said Thomas S. Loeb, president.

In third place was Bankers Trust — Investment Management Group, New York, which posted a net gain of $1.9 billion. For equity indexing, the firm reported a net gain of $2.7 billion, but lost business in other equity products resulted in the lower overall net gain in equity business.

State Street Bank & Trust Co., Boston, ranked fourth with a $990 million net gain in new equity business, of which $761 million was for indexing. Last year, it finished fifth, with a $720 million net gain, of which 85% was for index management.

Northern Trust Co., Chicago, holds the fifth spot this year, with a gain of $932 million, of which $640 million was for indexing.

Beutel, Goodman Capital Management Ltd., Houston, landed in the sixth spot, with a net gain of $650 million. It was the highest ranking active equity manager.

"1985 was a one time thing for a firm like ours," said Robert F. McFarland, president. "It was the year when everything came together.

"It takes a few years to establish yourself with clients and consultants," said Mr. McFarland of the firm that opened its American operations in early 1982. "In 1985, with three years of performance, plus the performance data portfolio managers brought from previous positions, we reached a level of maturity where larger funds considered us for the first time."

The firm uses a low price-earnings, value-oriented style, which many funds choose to have in their manager line-up, he said. The firm added 13 clients and $650 million.

Among the new clients are Southwestern Bell Corp., St. Louis, and Bell & Howell Co., Chicago.

Mr. McFarland added his firm probably won't appear in the Top 10 next year. "Our growth is largely behind us . . . and we are

Continued on page 36

Most new equity business (net)

Top 10 managers over $1 billion

Companies	$ mils.
Wells Fargo Investment, San Francisco	8,650.0
Mellon Capital Mgmt., San Francisco	5,475.0
Bankers Trust-Invest. Mgmt., New York	1,905.7
State Street Bank, Boston	990.0
Northern Trust Co., Chicago	932.0
Beutel, Goodman Capital Mgmt., Houston	650.0
Citicorp Investment Mgmt., New York	592.0
Boston Co. Inc., Boston	568.2
Franklin Portfolio Associates, Boston	554.7
Prudential Asset Mgmt., Newark, N.J.	550.0

Top 10 managers $250 mil. to $1 bil.

Companies	$ mils.
Brignoli, Curley & Roberts, New York	457.0
Pilgrim, Baxter, Hoyt & Greig, Wayne, Pa.	444.0
Jundt/Capen Assoc., Minneapolis	365.0
Donald Smith & Co., Paramus, N.J.	303.6
Pacific Financial, Beverly Hills, Calif.	273.5
Dreman & Embry Inc., New York	244.3
Mellon-Pictet Int'l. Mgmt., London	184.0
Roanoke Asset Mgmt., New York	168.0
Lieber & Co., Harrison, N.Y.	162.5
Renaissance Invest. Mgmt., Cincinnati	152.0

Top 10 managers under $250 million

Companies	$ mils.
Hahn, Holland & Grossman, Chicago	112.0
Eagle Asset Mgmt., St. Petersburg, Fla.	109.0
Tukman Capital Mgmt., Larkspur, Calif.	100.0
John McStay Investment Counsel, Dallas	90.0
Kurtz Capital Mgmt., Livingston, N.J.	78.0
Arnhold & S. Bleichroeder Intl., New York	70.0
Target Investors, Stamford, Conn.	67.0
Greenspan O'Neil Assoc., New York	56.8
Glass, Austin & Calvert, San Antonio, Texas	53.2
Crabbe-Huson Co., Portland, Ore.	51.4

Bond index, dedication managers fare well

By Trudy Ring

Bond index funds and dedicated or immunized bond portfolios attracted large chunks of pension assets in 1985, but active fixed-income management, including use of junk bonds, also drew clients.

Among firms with more than $1 billion under management, the ones with the largest net gain in tax-exempt fixed-income assets were J.P. Morgan Investment Management Inc., New York, which handles many dedications, and State Street Bank & Trust Co., Boston, a leading index fund manager.

Among the medium-sized firms, with $250 million to $1 billion under management, a variety of active fixed-income styles drew new assets. Big gainers in active management in this size group included Lowe, Brockenbrough, Tierney & Tattersall Inc., Richmond, Va., and NC Capital Management Group, Williamsport, Pa.

Among small firms, with less than $250 million under management, the biggest gainer was Magten Asset Management, New York, a junk bond specialist.

J.P. Morgan led its size group and fixed-income managers overall with a net gain of $3.15 billion in new fixed-income business. It also won the most new assets for dedicated bond portfolios, nearly $2 billion.

Outside of dedicated portfolios, J.P. Morgan's fixed-income strategy includes interest rate forecasting with an emphasis on sector and yield spread. In both active and passive fixed-income management, the firm at times uses non-traditional securities such as private placements, international bonds, mortgages and futures and options.

The firm provided *Pensions & Investment Age* with names of new clients on the condition that the names not be published. However, new clients reported in *P&I Age* previously included the Iowa Public Employees' Retirement System and the Caterpillar Tractor Co. pension fund, Peoria, Ill.

State Street Bank was second among large managers with $1.35 billion in new fixed-income assets. This included $654 million in bond index funds. In actively managed portfolios, as well as dedicated, immunized and indexed ones, the firm focuses on risk management.

State Street Bank also provided client names on the condition they not be published.

The third largest gainer among large firms was Duff & Phelps Investment Management Inc., Cleveland, with $1.05 billion in new fixed-income business. Duff & Phelps follows an active strategy, emphasizing interest rate anticipation and sector analysis and using high-quality bonds.

Clients added in 1985 include the Arizona State Retirement System, City of Seattle Retirement System and Louisiana State Employees' Retirement System.

Also gaining $1 billion in fixed-income business was Discount Corp. of New York Advisers. The firm takes a conservative yet active approach to fixed-income management, adjusting investments to anticipate interest rate movements. Its new clients included Eastman Kodak Co., Rochester, N.Y.; Pacific Telesis Group, San Francisco; and Southern Co. Services Inc., Atlanta.

Another leading gainer in assets for dedicated bond portfolios was National Investment Services of America, Milwaukee, with $735 million for dedications. It had a net gain of $770 million in fixed-income business, placing it fifth among large firms. New fixed-income clients included U S WEST Inc., Englewood, Colo., and Interlake Inc., Oak Brook, Ill.

NISA was the top gainer of fixed-income assets in 1984, thanks to a $2.4 billion dedicated bond portfolio for American Information Technologies Corp., Chicago. In general, other firms that gained much fixed-income business in 1985 were not among the top gain-

Continued on page 36

Most new fixed-income business (net)

Top 10 managers over $1 billion

Companies	$ mils.
J.P. Morgan Investment Mgmt., New York	3,153.0
State Street Bank, Boston	1,350.0
Duff & Phelps Investment Mgmt., Chicago	1,051.0
Discount Corp. of N.Y., New York	1,000.0
Nat'l. Invest. Serv. of America, Milwaukee	770.0
Putnam Advisory Co., Boston	700.7
Wellington/Thorndike, Doran, Boston	672.0
Prudential Asset Mgmt., Newark, N.J.	662.0
Morgan Stanley Asset Mgmt., New York	528.0
Wells Fargo Investment, San Francisco	507.0

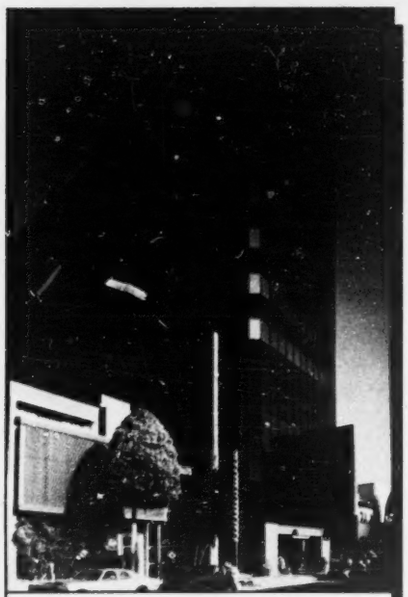
Top 10 managers $250 mil. to $1 bil.

Companies	$ mils.
Lowe, Brockenbrough, Richmond, Va.	195.0
N C Capital Mgmt., Williamsport, Pa.	161.6
Baring Int'l. Investment Ltd., Boston	151.0
Ward & Wissner Capital Mgmt., New York	110.0
Columbus Circle Investors, New York	100.0
Minton/Newbold's Capital Mgmt., Philadelphia	68.3
Travelers Hill Samuel Int'l., Hartford, Conn.	47.5
Marine Investment Mgmt., Springfield, Ill.	47.0
Chicago Corp., Chicago	41.0
PCM International, Newark, N.J.	20.0

Top 10 managers under $250 million

Companies	$ mils.
Magten Asset Mgmt., Corp., New York	149.0
Julius Baer Invest. Mgmt., New York	56.0
Portfolio Group Inc., New York	18.4
George K. Baum Mgmt., Kansas City, Mo.	12.0
American Express Asset Mgmt., New York	10.0
New Mexico Capital, Albuquerque, N.M.	7.6
American Asset Mgmt. Co., Cleveland	5.0
Applied Portfolio Disciplines, New York	5.0
C.J. Lawrence Mgmt., New York	5.0
E.M.G. Advisors, Westport, Conn.	3.7

Real Estate



The San Bernardino County Employees' Retirement System paid $19.4 million for a 97% equity interest in this Beverly Hills building, in a sale-leaseback from American Medical International Inc.

No buyers; 2 seek exemptions

Farm investments hard to harvest

By Steve Hemmerick

Two institutional investors are finding that selling their farmland holdings is a tough row to hoe.

After seeking outside buyers unsuccessfully, Travelers Insurance Co. and The Knutson Companies Inc. have filed requests with the Department of Labor to sell the farmland to other company units — in at least one case, at a loss.

In Travelers' case, the Hartford, Conn.-based insurer is seeking to sell 87,643 acres of farmland held in its commingled open-end real estate Separate Account R to its own general account for $24.5 million, about $2.7 million less than it paid originally.

In Knutson's case, the Minneapolis company has agreed to purchase about 1,500 acres in farmland for $852,600 from a profit-sharing trust the company had terminated. No other buyer could be found.

Travelers officials expect that once the land is removed from the commingled account, the investment performance of the account will improve. That, they say, is their primary objective.

No one from Travelers will comment on the proposal until all participants in the pension account have been notified formally.

Travelers acquired the land for $27.2 million between 1976 and 1981, but farmland prices have fallen sharply since then — as much as 50% in some areas of the country — and could go down further.

In fact, Travelers officials stated in a report to the Labor Department that according to an estimate from an independent firm, the proposed sale price is 41% higher than the farmland would be worth if it were held in the separate account on a buy-and-hold strategy for the next five years.

The papers filed with the Labor Department said the farm holdings have been dragging down the investment returns in Separate Account R, although the officials did not say to what extent.

Trustees for the $970 million Maine State Retirement System, an investor in Separate Account R, haven't been "overjoyed" with the account's returns, said Roberta M. Weil, Maine's executive director.

But she said she had no knowledge of Travelers' plans to dispose of the account's farmland. She said the system's trustees would meet soon with Travelers executives and other system advisers at a semiannual meeting.

(An insurance company "separate" account includes pooled assets that are segregated from the insurer's general account, with income gains and losses devoted to a specified category, in this case the 129 plans participating in the fund.)

Of the $500 million in the separate account, the greatest contribution, $73.9 million, comes from The Travelers Cos. own retirement plan for salaried employees.

While performance returns for Separate Account R have been sharply ahead of the Consumer Price Index, they have been behind several other bank and insurance company commingled real estate accounts.

According to Pensions & Investments' Performance Evaluation Report, in the three-year period ended Sept. 30, PRISA, the giant real estate commingled account managed by Prudential Insurance Co. of America, had a return of 10.9%, compared with Separate Account R's return of 8.2%. For the same period, Equitable's commingled account had a return of 13.5%. The CPI returned 3.3%.

Travelers officials would not reveal what the return would have been without the farmland.

To resolve the situation, Travelers called in The Karsten Companies, Los Angeles, to serve as independent fiduciary and adviser. Karsten outlined three possible strategies:

- Hold the farmland in the real estate separate account for five years, which would result, according to an independent estimate, in the farmland having a present value of $14.4 million.
- Place the farmland on the open market at a fair market value of $18 million, which would mean a 5% sales commission and closing costs would have to be deducted when it was sold.
- Sell the farmland to the insurance company's general account at $24.5 million, the appraised value of the land as of Dec. 31, 1984, before subsequent depreciation.

The general account already holds $197 million in farmland.

Karsten's valuation was done on the assumption the land would be used as farmland. An examination of the property found the highest and best use of the land would be for farming.

Travelers owns 16 agricultural properties, ranging from 283 acres to 7,153 acres, in Arkansas, Colorado, Georgia, Illinois, Kansas and Wyoming.

When the insurance company bought the parcels, Travelers investment professionals believed the land would achieve long-term growth in value. However, because of the general economic distress experienced by large segments of the agricultural community, "these properties have significantly re-

Continued on page 26

T. Rowe sub latest in trend among firms

By Alan Krauss

NEW YORK — T. Rowe Price Associates Inc.'s establishment of a real estate investment management subsidiary is the latest example of a major money management organization broadening its product line to become a financial supermarket for pension funds and individual clients.

The new subsidiary, T. Rowe Price Realty Advisers Inc., will be staffed through the defection of three key people from Coldwell Banker Capital Management Services.

Seeds of the new firm were sown about two years ago. It was then that James G. Nugent, senior vice president of Coldwell Banker Capital, proposed to Curran W. Harvey, then president of T. Rowe Price Associates, a collaboration that would enable the two firms to reach markets neither was fully able to tap on its own.

Mr. Nugent suggested T. Rowe Price was losing business because it lacked the capability to offer its clientele real estate investments. Coldwell was prepared to supply the expertise T. Rowe Price needed to offer such capabilities, and in return, Mr. Nugent figured, those investors would become real estate clients of Coldwell.

"T. Rowe had better access to (investment services) customers than Coldwell, which is a real estate company and not a marketing company," Mr. Nugent said, recalling his thinking at the time. "Our ability to reach people is basically limited — we have no marketing staff. The logical thing would be to team up with a reputable, first-class outfit that did not have real estate expertise but that did have marketing capabilities."

The conversation led to T. Rowe Price's successful Realty Income Fund I, a consumer-oriented limited partnership offered in conjunction with Coldwell Banker that raised $90 million in the first four months of 1985, according to Steven E. Norwitz, T. Rowe Price vice president.

Ultimately, it also led to the firm's decision to form its own property-investment subsidiary, after senior management at Coldwell's corporate parent, Sears, Roebuck & Co., quashed

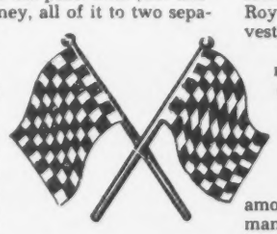
Separate accounts draw more assets

By Steve Hemmerick

Ten equity real estate advisers got $3.5 billion from tax-exempt clients in 1985, and some of those advisers reported a significant amount of money went to separate investment accounts.

According to *Pensions & Investment Age*'s Scorecard, the 10 advisers getting the largest inflows of cash have received slightly more than 70% of all the reported new tax-exempt money committed to equity real estate in the past year, $4.8 billion.

Every one of the top five advisers, in terms of committed dollars, said at least some of the money, and in two cases all of it, was slated for a separate account. Richard Ellis Inc. led the pack with $867 million in new money, all of it to two separate accounts.In a separate account, money is not pooled with that of other tax-exempt investors and the separate account investor is ready to have the adviser make direct investments for the account.



Although some insurance company pooled accounts are called separate accounts, the word "separate" means separated from the insurance company's general account, and not the account of one tax-exempt investor.

According to real estate investment years ago seldom invested in anything but open- or closed-end pooled, also called commingled, real estate funds.

But through the years, the pension officers for many larger funds have diversified and now are doing more specialized investing, although pools are still the most common form of real estate investment for pension funds.

Richard Ellis, a New York-based real estate advisory firm that handles only separate accounts, said the bulk of its new real estate money, $500 million, came from the Royal Dutch Shell pension fund for investment in domestic real estate.

Heitman Advisory Corp., Chicago, reported receiving the second largest dollar amount in 1985, $536 million. David M. Glickman, executive vice president, said about half of the money went to separate accounts.

TCW Realty Advisors, Los Angeles, reported the third highest amount, $430.9 million. Vincent Martin, managing director for TCW, said a "very limited" amount of that did not go into a pooled account. But, he said, the separate account money resulted in about a 20% increase in equity contributions to TCW during the past year.

Equitable Real Estate Investment Management, New York, reported $446 million in new money in 1985. It would have ranked among the Top 10 but did not comply with all questionnaire require-

most of the money went into separate accounts.

All of the $255.5 million The Boston Co. Real Estate Counsel Inc., Boston, received in 1985 went to separate accounts, said Robert A. Radloff, president.

"The market is indicating that direct investments, the separate account portfolio, is going to be increasing market share," he said. New clients for Boston Counsel in 1985 are Eastman Kodak Corp., State of Wisconsin Investment Board and Alaska Permanent Fund.

TCW also added clients: Agway Inc.; Central Illinois Light Co.; Cincinnati Bell Telephone Inc.; Dean Foods Co.; A.S. Hansen Inc.; Illinois Municipal Retirement Fund; Minnegasco Inc.; Minnesota State Board of Investment; Missouri State Employees' Retirement System; Nevada Public Employees' Retirement System; North America Philips Corp.; City of Orlando; Pacific Telesis Group; and U S WEST Inc.

Heitman Advisory added: Sara Lee

Most new real estate equity business (net)

Companies	$ mils.
Richard Ellis, New York	867.0
Heitman Advisory Corp., Chicago	536.0
TCW Realty Advisors, Los Angeles	430.9
Eastdil Realty Inc., New York	274.0
Boston Co. Inc., Boston	255.5
J.M.B. Institutional Realty, Chicago	250.0
Jones Lang Wootton Realty, New York	250.0
Aetna Life & Casualty, Hartford, Conn.	246.4
Copley Real Estate Advisors, Boston	233.0
J.W. O'Connor & Co., New York	200.0

Wrap-up

Some selling advised

NEW YORK — Some real estate investors might do well in 1986 to sell off 15% of their real estate holdings, according to Landauer Inc., real estate advisers.

In a Landauer report, "1986 Real Estate Market Forecast," it was suggested 1986 could be an "excellent year to lighten one's portfolio" and earn "relatively high price levels" for real estate.

As part of a hedging action, the report suggested investors might "dispose of lackluster properties." Real estate will continue to sell well, it said, as long as the nation's economic picture remains "muddled."

For real estate in general, the report characterized 1986 as a fair, but not outstanding, year.

The catastrophe some real estate investors are expecting in some areas, such as a widespread collapse in prices for office buildings and severely reduced income for others, won't happen, the report said.

The report also said real estate managers at Landauer don't expect a severe downward correction in rents and prices for properties.

It noted, however, some significant problems already have been experienced in areas where there is a "weak economic base" and oversupply of some properties in Houston and New Orleans.

The report said there won't be as many foreclosures as anticipated. Instead, it said, there will be a change of ownership.

The ownership will sometimes change, according to the report, as a result of a squeeze on the developer by the lender equity-participant.

The report didn't say pension fund managers would be putting the squeeze on developers, but much of the equity property they hold is in the form of equity participation, except for those fund managers that own properties 100% and pay all cash.

If there is a real shakeout coming, it likely will happen in mid-1987, said the report. The severity of it will, in part, depend on the length, breadth and depth of an economic recession, if one happens.

The longer a recession, it pointed out, the longer it would take for the demand for space to meet supply.

The best buys in real estate in 1986, the report suggested, would be in the areas of shopping centers and planned light industrial parks.

Shopping centers have continued to recover sharply from a mild slump in 1980-'82. That recovery, the report said, is in part due to the nearly 20% increase in real consumption expenditures since 1980, coupled with a modest rate of new retail buildings.

"The planned light industrial park, which includes a mix of light assembly, high technology, distribution and office space is in especially high demand today," the report said.

Premiums will be paid by institutional buyers, it said, to obtain an entire park.

But what the report called the "real sleeper" among best buys in real estate is in the rental housing market.

The preferred purchases in rental housing are away from cities like Boston, Los Angeles and New York, where, the report said, "rent controls seem an inevitability."

New real estate head

NEW YORK — Edgar A. Stoudt has been placed in charge of Metropolitan Life Insurance Co.'s real estate investment committee, real estate acquisitions section and architectural unit.

Mr. Stoudt joined Metropolitan in 1955 as a field inspector and was appointed a vice president in 1971.

The insurance company manages $429 million in tax-exempt real estate assets and $17.9 billion in total real estate assets, including those in Metropolitan's general account.

Mr. Stoudt is now senior vice president in the real estate investment department.

Investments hard to harvest . . .

Continued from page 25

duced the total return on investment for the equity component of the (separate) account in recent years," Travelers stated in its Labor Department filing.

(The cash-on-cash rate of return on farmland now, many agricultural experts agree, is between 6% and 7%, a yield significantly lower than some other investments (*Pensions & Investment Age*, Oct. 14.)

If a 45-day waiting period that began Jan. 17 expires without adverse comments or a request for a hearing on the proposal, the proposed transaction likely will receive Labor Department approval, according to Alan Levitas, an employee benefit plan specialist at the department.

He noted Travelers' report was quite detailed and included a third-party opinion.

Officials for The Knutson Companies Inc. also have applied for an exemption under the Employee Retirement Income Security Act. Both Knutson and Travelers need the exemptions because of prohibitions on transactions between parties in interest, in these cases the plans and the sponsoring companies.

Knutson terminated a $1.4 million profit-sharing trust in September 1984 following the sale of its wholly owned subsidiary, Knutson Mortgage and Financial Corp.

But company officials said they have not been able to dispose of 1,541 acres of farmland the company bought for the trust between 1974 and 1979.

At the time they purchased the property, plan officials thought the farmland would generate a return of 20% to 25%.

But when they approached two real estate companies to sell the land, both refused to even list the property for sale, saying the market for farmland was so weak, finding a buyer would be unlikely, plan officials said.

Knutson, in an attempt to distribute the assets of the trust to its participants, has proposed selling the land to the company for $852,600, an appraised value as of Dec. 31, 1984, and the highest of three independent appraisals. It is not known how much the land was worth originally because through the years the trust sold off bits and pieces that had appreciated. ■

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T. Rowe starts . . .

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firms to eliminate perceived competition between Coldwell and another Sears subsidiary, Dean Witter Financial Services Inc.

Last month, Reed Samuelson, president of Coldwell Banker; Scott Calder, acquisitions specialist; Gary Neumeier, a portfolio manager; and others, joined T. Rowe Price to form its realty subsidiary (*Pensions & Investment Age*, Jan. 20).

"Our firm had long considered adding real estate as what we consider a 'third leg' to our stock and bond investment capabilities," said Mark R. Fetting, T. Rowe Price vice president. "We're doing it now as both institutions and individuals are diversifying their portfolios into real estate."

The thinking that led to T. Rowe's expansion into the real estate arena is typical of many investment management companies today.

The trend is likely to play a significant part in the transformation of institutional real estate investment management, as financial giants like T. Rowe Price, Shearson Lehman Brothers Inc. and Kemper Financial Services Inc. infringe on the traditional preserve of the few firms that have dominated the field.

"The big financial services houses are recognizing that they'd better have real estate on their plates as well as other boutiquelike services," said David Glickman, president of one old-line real estate manager, Heitman Advisory Corp., Chicago.

Mr. Glickman predicted within two years all the big mutual fund companies will offer real estate investments. Most, if not all, the consumer investment firms also have substantial institutional assets under management as well.

"After insurance companies and brokerage houses, which were the first (to enter the real estate investment management business), we're starting to see the financial services houses getting into it," said Darlene T. DeRemer, who was involved in the formation of T. Rowe Price Realty Advisers before leaving forState Street Bank & Trust Co., Boston.

"Without an experienced team that can offer the same disciplined approach to real estate as the company offers with stocks and bonds, it's a mistake to enter the business," she said. "The disciplines involved are similar, but it's a unique asset class with a different cycle all its own and with different characteristics."

Development of real estate capabilities represents a turnabout for many investment management companies, according to Stephen E. Roulac, founder of Stephen E. Roulac & Co. a San Francisco-based real estate consultant.

"There's a real move now to be able to offer real estate as part of a full portfolio of investment services," Mr. Roulac said. "The options are acquiring it, developing it or ignoring it."

He suggested firms that fail to offer their clients real estate services will lose investors who prefer to obtain all their investment services from the same firm.

David L. Babson & Co. Inc., a Boston-based investment manager, joined forces with Lehndorff U.S. Equities Inc. in 1983 to form Lehndorff & Babson Real Estate Counsel Inc., Dallas, which as of Dec. 31, had $460 million in tax-exempt assets under management.

G. Andrews Smith, Lehndorff & Babson executive vice president and chief operating officer, said the combination resulted from Lehndorff's decision to increase its domestic pension fund clientele.

"Lehndorff brings to the combination the real estate product — we find it, negotiate it, and get it under contract," he explained. "Then Babson goes and tells its institutional clients about it. Those clients then have the opportunity to participate in the deals, becoming clients of Lehndorff & Babson for real estate purposes.

"Babson gains the ability to give its big institutional clients real estate services as well as stocks and bonds. For Lehndorff, it was an additional capital source."

Mr. Smith noted it is often cheaper to buy a company with an established product than to develop a new product: "It's merger mania on a whole different product level."

Shearson Lehman Brothers chose to acquire fully developed companies it could integrate into its own conglomeration.

George W. Phillips, Shearson Lehman vice chairman, noted the firm's 1981 acquisition of The Boston Co. brought it The Boston Co. Real Estate Counsel, active managers of both debt and equity real estate assets for institutional clients. The next year, Shearson expanded into retail real estate investment management with Balcor Co., a marketer of limited partnership real estate investments.

"We sought vertical integration — we wanted to build our own capabilities for various aspects of real estate; we wanted to control the quality levels of the various capabilities; we wanted to assemble a first-class professional organization; and, finally, the purchases were financially attractive from Shearson Lehman's point of view," said Mr. Phillips.

The company already owned Shearson Lehman Brothers Mortgage Corp., Irvine, Calif., which originates mortgages in all 50 states and then packages the mortgages for sale to other financial institutions or as mortgage-backed securities.

T. Rowe Price Associates' Mr. Fetting said he sees pension fund investment in real estate assets approaching a second phase, with T. Rowe Price Realty Advisers positioned to tap into the expansion.

"Starting in the mid-1970s, we went from seeing most Fortune 1,000 companies with no real estate in their pension portfolios to the situation now where the majority of them have at least some real estate and the average is approaching 5%," he said. "So the Fortune 1,000 market is pretty well served, although most people expect allocations to continue to increase. "The second wave will consist of additional allocations from the Fortune 1,000, initial allocations from smaller corporate funds and especially from the public plans that are now aggressively pursuing real estate."

Mr. Fetting said T. Rowe's subsidiary is planning its specific strategy for approaching institutional investors later this year. ■

Separate accounts . . .

Continued from page 25

Corp.; Nevada Public Employees; Federal Express Corp.; Iowa Public Employees' Retirement System; Los Angeles County Employees' Retirement Association; Virginia Supplemental Retirement System; Alaska Permanent Fund.

Eastdil Realty Inc., New York, reported an additional $274 million in 1985 for real estate investment.

The real estate firms getting the most mortgage money, and the amount received in 1985, are: Mellon Real Estate Investment Management Corp., New York, $146 million; Mortgage Investors Group Inc., Detroit, $85 million; Bankers Life Co., Des Moines, Iowa, $45 million; Eastdil Realty, $26 million; Union Labor Life Insurance Co., Washington, $8.5 million; and D.A. Management Inc., Huntington Beach, Calif., $4.8 million. ■

GIC firms surge . . .

Continued from page 3

this year's total. Aetna reported about $1.3 billion, or $700 million less than this year.

Joseph Taglieri, Prudential vice president, partly attributed his firm's move into the top spot to a more concentrated marketing effort that "zeroed in" on sponsors of large plans.

He said Prudential was effective in moving window GIC products, which offer the ability to make additional contributions during a "window" period at the guaranteed rate, to saving plans.

Also, plan reversions provided a big piece of business, approximately $1.3 billion in annuity close-outs.

New Prudential clients include The Chubb Corp., New York; Commonwealth Edison Co., Chicago; George B. Buck Consulting Actuaries, New York; and Stauffer Chemical Co., Westport, Conn.

Harvey M. Young, Metropolitan's senior vice president, pointed to defined contribution plans, such as 401(k) and saving plans, as the main reason 1985 was such a good year for insurance companies.

In 1985, Metropolitan consciously sought a better spread of business, rather than relying just on GICs sales, Mr. Young said. That explains the drop in GIC business, he added.

Metropolitan requested client names not be published.

At Aetna Life & Casualty William F. Towell, director of employee benefit products, said the upsurge in sales to defined contribution plans, which were responsible for two-thirds of the company's net gain, was the reason for Aetna's jump in the rankings.

Mr. Towell said defined benefit plan business slacked off because those plans are "more rate sensitive . . . (and) rates (on GICs) have gone down tremendously."

The firm requested the names of new clients not be published.

Although 1985 was a good year for insurance companies, Metropolitan's Mr. Young cautioned that what goes on in Washington may affect business.

Congress, driven by the budget deficit and the need for revenue, is considering altering the tax laws that regulate 401(k) plans. Also, the ERISA Advisory Council has a task force looking at the termination of overfunded pension plans, which has been a source of business for insurance companies.

For balanced management, Lehman Management Co., New York, posted a net gain of $528 million, enabling it to edge out Wells Fargo Investment Advisors and Mellon Capital Management, both of San Francisco, for the No. 1 ranking in that category.

Wells Fargo and Mellon Capital reported net gains of $493 million and $425 million, respectively.

The firms, riding the popularity of passive management, scored with balanced products based on indexed equity and fixed-income holdings.

In all, balanced managers reported a net gain of about $5 billion. In later interviews, however, some said the use of balanced management by large pension funds may be declining.

Coleman M. Brandt, president of Lehman, said balanced management is still a legitimate market despite the tendency for pension executives from large funds to look for specialized managers.

Lehman has done well because there is a good market for its risk averse style, he said.

New balanced clients of Lehman include Navy Federal Credit Union, Vienna, Va.; Cincinnati Retirement System; Lykes Brothers Inc., Tampa, Fla.; and United Food & Commercial Workers, Atlanta.

The Boston Co., with $246.4 million in net business, ranked sixth among balanced managers.

Peter Summers, president of Boston-based Boston Co. Institutional Investors Inc., a wholly owned subsidiary of the Boston Co., said increased awareness of the asset mix decision may be contributing to less demand for balanced managers.

But his firm gained balanced business during the year because of its popularity with middle market funds, Mr. Summers said. In addition, union funds are receptive to the marketing overtures of balanced managers, he noted.

A new balanced client of the Boston Co. is Detroit Retirement Systems.

Morgan Stanley reported a net gain of balanced business of $349 million, up about 50% over the firm's 1984 net gain, and good enough to snare the fourth spot in this year's Top 10 rankings.

Gail Hunt Reeke, vice president of Morgan Stanley, said balanced managers that can make good judgments about the economic environment in a five-year to 10-year time frame will continue to do well.

Still, she conceded there is "no question that there is a real burgeoning of attention being paid to asset allocation," and there is less of a tendency on the part of large pension funds to have multiple balanced managers in their line-up. "You don't want someone zigging while somebody else is zagging," she said.

In addition to the firms on the Top 10 chart, INVESCO Capital Management Inc., Atlanta, and Lazard Freres Asset Management, New York, reported enough net balanced business to be ranked, but they declined to identify their new clients and were excluded.

For firms with total tax-exempt assets under management between $250 million and $1 billion, Harbor Capital Management Inc., Boston was first, with net balanced business of $169 million. Second was Dreman & Embry Inc., New York, with $76.3 million.

The $57 million net gain in new balanced business by P.E. Becker Inc., Portland, Ore., was good enough to allow the firm to claim the top spot for managers with less than $250 million under management.

In addition to those in the Top 10 for that category, Loewi Asset Management, Milwaukee, which reported a net gain of $35 million, and Petersen, Flynn and Dinsmore Inc., Los Angeles, with a net gain of $18.5 million, would have been third and sixth, respectively, if they had included client names on their questionnaire. ■

— ED CHRISTMAN

Most new GIC business (net)

Companies	$ mils.
Prudential Asset Mgmt., Newark, N.J.	4,318.0
Metropolitan Life Ins., New York	3,839.0
Aetna Life & Casualty, Hartford, Conn.	2,073.2
New York Life Ins. Co., New York	1,453.3
John Hancock Financial, Boston	1,414.0
Provident National, Chattanooga, Tenn.	1,051.7
New England Life, Burlington, Mass.	847.0
Pacific Mutual Life, Newport Beach, Calif.	564.0
Primco Capital Mgmt., Louisville, Ky.	400.0
Northwestern National Life, Minneapolis	251.2

Most new balanced business (net)

Top 10 managers over $1 billion

Companies	$ mils.
Lehman Mgmt. Co. Inc., New York	528.0
Wells Fargo Investment, San Francisco	493.0
Mellon Capital Mgmt., San Francisco	425.0
Morgan Stanley Asset Mgmt., New York	349.0
First Union Nat'l. Bank, Charlotte, N.C.	249.0
Boston Co. Inc., Boston	246.4
Shields Asset Mgmt., White Plains, N.Y.	240.0
Oppenheimer Capital Corp., New York	237.3
Hutton Capital Management, New York	210.8
NCNB National Bank, Charlotte, N.C.	150.0

Top 10 managers $250 mil. to $1 bil.

Companies	$ mils.
Harbor Capital Mgmt. Inc., Boston	169.0
Dreman & Embry Inc., New York	76.3
C-S Capital Advisors Inc., Cincinnati	65.0
Lowe, Brockenbrough, Richmond, Va.	65.0
NWQ Investment Mgmt. Co., Los Angeles	65.0
Laidlaw Capital Mgmt. Inc., New York	50.0
Trust Services of America Inc., Los Angeles	48.4
Chicago Corp., Chicago	45.7
Liberty Nat'l. Bank & Trust Co., Louisville, Ky.	45.0
Wood Struthers & Winthrop, New York	37.0

Top 10 managers under $250 million

Companies	$ mils.
P.E. Becker Inc., Portland, Ore.	57.0
Capital Advisor, Tulsa, Okla.	36.0
Anchor Capital Advisors, Boston	35.0
Crabbe-Huson Co., Portland, Ore.	22.4
Pension Portfolio Advisors, Southfield, Mich.	18.0
Heartland Capital Mgmt., Indianapolis	15.7
American Asset Mgmt., Cleveland	10.0
Kirr, Marbach & Co., Columbus, Ind.	9.5
Argus Investment, Newport Beach, Calif.	7.1
Greenspan O'Neil Assoc., New York	7.0

Bond index and dedication . . .

Continued from page 4

ers the previous year.

Another leading indexer was Wells Fargo Investment Advisors, San Francisco, with $476 million in new assets for bond index funds. It had $507 million in new fixed-income business overall, placing it 10th among large firms. New fixed-income clients included the Chicago Policemen's Annuity & Benefit Fund and the Rockefeller Foundation, New York.

Among mid-sized firms, Lowe, Brockenbrough, Tierney & Tattersall gained $195 million in fixed-income business from clients that included Miles Laboratories Inc., Elkhart, Ind.; Central Pension Fund, International Union of Operating Engineers, Washington; the Jacksonville (Fla.) City Retirement System; and the Memphis (Tenn.) City Retirement System.

In fixed-income management, the firm uses interest rate anticipation and a balance between market timing and sector selection.

NC Capital Management Group gained nearly $162 million in fixed-income business. It provided client names on the condition they not be published. Its fixed-income strategy is an active one using short- to intermediate-term securities.

Another mid-sized manager, BA International Investment Management Ltd., London, actually bested those two firms with $245 million in new fixed-income business, but it was excluded because it did not provide any client names.

Another international firm, Baring International Investment Management Ltd., Boston, also did well among medium-sized management firms. It gained $151 million in fixed-income business from clients that included the General Motors Corp. pension fund, New York.

Magten, the top gainer among small firms, won $149 million in new fixed-income business. The firm concentrates on high-yield, low-grade bonds, also known as junk bonds.

Julius Baer Investment Management Inc., New York, had the second largest gain among small firms, with $56 million in new fixed-income business. The firm invests internationally, seeking an active country/currency allocation. It provided client names on the condition that they not be printed. ■

Indexing remains dominant . . .

Continued from page 4

approaching the level where we want to stop taking new clients."

The second ranked active equity manager, seventh overall for equities, was Citicorp Investment Management Inc., New York, with $592 million net gain in equity business, of which $70 million was for index management.

Craig Bennett, business manager, said the firm owed its position to an increased interest in all specialty products, including international management.

The firm did not want the names of its new clients published.

Eighth-ranked Boston Co., Boston, and 10th-ranked Prudential Asset Management Group, Newark, N.J., also had success with index management. Boston Co. had $90 million indexed of its $568.2 million in net equity gain, while Prudential had $186 million indexed of its $550 million net equity gain.

Batterymarch Financial Management, Boston, third last year, was among the equity managers disappearing from the Top 10 this year. Batterymarch had a net decline of $473 million for 1985.

Fidelity Management Trust Co., Boston, seventh last year, would have placed sixth in this year's

rankings, and INVESCO Capital Management Inc., Atlanta, would have placed eighth. But both failed to disclose names of new clients, eliminating them from the rankings.

Dimensional Fund Advisors, Santa Monica, Calif., the 10th place firm last year, posted a net gain of $382.6 million, placing it 14th this year.

Brignoli, Curley & Roberts Associates, New York, won the top spot for managers with assets under management of $250 million to $1 billion. It had a $457 million net gain in equity business.

Brignoli, Curley & Roberts gained the top spot because Geewax, Terker & Co., King of Prussia, Pa., which had a net gain of $550 million, failed to include the names of new clients on its questionnaire.

Hahn Holland & Grossman, Chicago, with a net gain of $112 million, was the top equity manager for managers with less than $250 million under management.

However, the firm would have been replaced by Janus Capital Corp., Denver, if it had included new client names with the $124.7 million net gain it reported on its questionnaire. ■

Money movers appear in each issue.

Please send information for the money movers section of Pensions & Investment Age to:

Joanne Friedrick
P&I Age
740 N. Rush St.
Chicago, Ill. 60611.

Money movers

Associated Dry Goods Corp.

NEW YORK — Associated Dry Goods Corp., with $165 million in pension assets, dropped Avatar Associates, New York, and put the $17 million in proceeds into a dedicated bond portfolio that was set up by Morgan Stanley & Co.

The portfolio is being managed by Kemper Financial Service Inc., Chicago, said Theodore Babcock, assistant treasurer.

The dedicated portfolio, composed of a mix of Treasury and corporate bonds, yields about 11.6%.

It is Associated's first dedication, he said.

"We were pretty happy with Avatar's performance," Mr. Babcock said, but added Avatar was the most expendable manager without upsetting Associated's asset mix.

Burroughs Wellcome Co.

RESEARCH TRIANGLE PARK, N.C. — The Burroughs Wellcome Co. has purchased a $36 million guaranteed investment contract from the Prudential Asset Management Group, Newark, N.J., for the company's 401(k) savings plan.

The plan has about $50 million in assets, said Glenn Andrews, financial planning manager.

About $33 million of the $36 million came from a Prudential GIC that matured Jan. 1, he said. The rest came from the variable interest fund option of the plan, which was run by Wertheim Asset Management Services Inc., New York.

Mr. Andrews said the yield of that cash fund, which was invested mostly in government securities, was lower than what GICs are paying, so fund officials dissolved that plan option in favor of placing the assets in GICs.

Burroughs Wellcome also has a $190 million pension fund, which was unaffected by the moves.

Harte-Hanks Communications

SAN ANTONIO, Texas — Harte-Hanks Communications Inc. appointed Leavy Investment Management Inc., Atlanta, to run its two largest company pension plans, which have combined assets of $23 million.

Leavy, which will run the entire amount in a balanced account, was selected after a search conducted by the Houston branch of SEI Funds Evaluation Services.

"Our criteria was we wanted someone who had performed in the top quartile over five years, and (Leavy) had performed in the top 5% over both five- and 10-year periods," said Richard M. Gozia, Harte-Hanks vice president-finance.

The trustees also liked Leavy's investment philosophy, which is based on buying undervalued stocks, said Mr. Gozia.

The company dropped Vaughan, Nelson, Scarborough & McConnell Inc., Houston. Mr. Gozia said the firm was dropped because it did not appear in the top quartile of SEI's universe for the five-year period.

Brown Printing Co.

WASECA, Minn. — The $20 million Brown Printing Co. pension fund hired Hahn Holland & Grossman, Chicago, and MCQ Inc., Torrance, Calif., to manage $4 million each, said Paul Lohse, assistant controller.

Hahn, Holland & Grossman will run equities and MCQ will run fixed income enhanced with hedging devices, Mr. Lohse said.

They were funded with money formerly run in-house.

Standard Valuation, St. Paul, assisted in the manager selection.

Axia Inc.

OAK BROOK, Ill. — Axia Inc., with $20 million in pension assets, hired three investment managers and released another, said Raymond J. Kulla, vice president and general counsel.

Hired were Resource Capital Advisers Inc., Milwaukee, for a $3 million equity portfolio; First Chicago Investment Advisors, for $5 million in a multiasset portfolio; and Harris Trust and Savings Bank, Chicago, for a $5 million fixed-income account. Released was Grace Capital Inc., New York.

First Chicago's portfolio includes real estate, venture capital, small-capitalization stocks and foreign equities, Mr. Kulla said.

The money allocated to the new managers came from cash and Grace Capital's $2 million equity account.

Mr. Kulla said the manager changes were made as the result of a three-part study conducted by the fund's consultant, A.S. Hansen Inc., Lake Bluff, Ill. Hansen also served as the manager search consultant.

Southwestern Bell Foundation

ST. LOUIS — The Southwestern Bell Foundation, which has assets of about $10 million, has hired its first external money managers, according to Roger Wohlert, assistant treasurer.

The assets of the foundation, which was formed a year ago, had been managed internally in short-term instruments, said Mr. Wohlert, who also serves as assistant treasurer-corporate finance in overseeing Southwestern Bell's $4 billion pension assets.

Mr. Wohlert said the foundation has hired MSecurities, Dallas, to run an equity account and Centerre Trust Co., St. Louis, to manage an equity and a fixed-income portfolio. He said the amount to be given to each has not been determined and the foundation is awaiting additional contributions before making an asset allocation decision.

Cooke Inlet Communications

NEW YORK — Cooke Inlet Communications Corp. hired Boston Safe Deposit and Trust Co. to be trustee for the $3 million profit-sharing plan of WTNH-TV New Haven, Conn.

Cooke owns the TV station in partnership with two other companies, said Lynn Fogel, director of employee benefits.

W.R. Grace & Co.

NEW YORK — The about $740 million W.R. Grace & Co. pension fund hired Bankers Trust Co., New York, as its master trustee, replacing Marine Midland Bank, said S.A. Ollila, assistant treasurer.

Harris Corp.

MELBOURNE, Fla. — The Harris Corp., with about $430 million in employee benefit assets, has hired two fixed-income managers after conducting an internal management search.

John Small, manager of benefits and retirement plan finance, said Neuberger & Berman will receive $50 million, while Dreyfus Management Inc. will run a $25 million fixed portfolio. Both firms are based in New York.

Houston Policemen's Retirement

HOUSTON — The Houston Policemen's Retirement System hired Bankers Trust Co., New York, as its master trust bank, replacing First City National Bank of Houston, according to Gene Attebery, business manager.

The $348 million fund was seeking more sophisticated banking services, said Mr. Attebery. He said the fund's board reviewed five banks and selected Bankers from two finalists. The other finalist was Northern Trust Co., Chicago.

Mr. Attebery said the fund wanted the additional on-line computer capability available from the larger bank. Specifically, he said, the fund needed the securities lending capability and performance measurement software in order to monitor more closely the fund's growing stable of money managers.

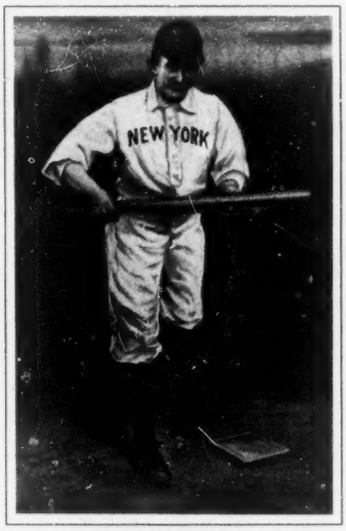
SEI Funds Evaluation Services assisted in the search.

Warren General Employees' Fund

WARREN, Mich. — The $42 million Warren General Employees' Retirement Fund hired Oppenheimer Capital Corp., New York, to run $20 million in a balanced account, said Richard Fox, city controller.

Funding for Oppenheimer came from a reduction in the amount managed by Alliance Capital Management Corp., Chicago, which still handles $20 million in a balanced account for the fund, Mr. Fox said.

SEI Funds Evaluation Services, Chicago, assisted in the hiring.



Courtesy of the Baseball Hall of Fame, Cooperstown, NY

We don't try for home runs either.

His name was Wee Willie Keeler, baseball's greatest place-hitter. Standing no taller than the batboy, his lifetime average of .345 remains today as one of the highest in baseball history. Yet in 17 seasons he managed to hit only 32 home runs. Some people say he never meant to hit any.

His approach to baseball was simple. Rather than go for the long ball, he just "hit 'em where they ain't." The result: 3 batting titles, an all-time major league record for most singles in a season with 202, and an entire season (564 at bats) without striking out once.

At Rampart, we don't try for homeruns either. Instead, we emphasize low risk, highly consistent returns, making use of option/equity skills that we've been developing for over a decade.

Unlike Wee Willie, we at Rampart will never make it to Cooperstown. But in our business, performance, not fame, is the name of the game.

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Managers win . . .

Continued from page 3

cial Services; Boston, 10th. 1984 figures for those managers are unavailable.

Four managers dropped out of the Top 10. The Travelers Cos., fifth in 1984, and Fischer, Francis, Trees & Watts Inc., New York, seventh, did not submit a questionnaire for this year's Scorecard.

The other managers that dropped off the list were 1984's third-ranked National Investment Services of America Inc., Milwaukee, which reported a net gain of $802 million for 1985, placing it 24th; and 1984 10th-place Batterymarch Financial Management, which reported a net loss of $473 million for 1985.

Among managers with tax-exempt assets under management totaling between $250 million and $1 billion, the top net gainer was Brignoli, Curley & Roberts Associates, New York.

The firm reported $457 million in net new business — all equities — from 13 clients including U S WEST Inc., Englewood, Colo.; Johnson & Johnson, New Brunsick, N.J.; Minnesota Mining & Manufacturing Co., St. Paul; and the Virginia Supplemental Retirement System, Richmond.

No. 2 was Pilgrim, Baxter, Hoyt & Greig, Wayne, Pa., which reported $444 million in equities. Third was TCW Realty Advisors, Los Angeles, which reported $430 million.

Had Geewax, Terker & Co., King of Prussia, Pa., reported names of some new clients, its $550 million in net new equity accounts would have catapulted the firm to the top spot for managers with assets under management of between $250 million and $1 billion.

Among managers with less than $250 million under management, Magten Asset Management, New York, led in net dollar gain. The firm reported a net gain of $149 million, all in fixed income. Of that, $73 million was additional funding from existing clients and $76 million was from eight new clients.

Magten's new clients include Niagara Mohawk Power Corp., Syracuse, N.Y.; Los Angeles Fire & Police Pension System and the Minneapolis Teachers' Retirement Fund Association.

Hahn, Holland & Grossman, Chicago, was second in that category, with $117 million net gain, and Eagle Asset Management, St. Petersburg, Fla., was third, with $109 million. ■

Securities prices listed

NEW YORK — The Bond Buyer, in conjunction with the Mortgage-Backed Securities Clearing Corp., will offer a daily pricing service that gives the daily closing market price on all Ginnie Mae, Fannie Mae and Freddie Mac mortgage-backed securities.

MBSCC polls brokers at the close of each business day and transmits the average prices to The Bond Buyer, which applies the data to each coupon and to each pool. In addition, each Ginnie Mae, Fannie Mae and Freddie Mac pool will be available as part of an individual pricing service in which the price will be adjusted according to the payoff history of each pool.

The information is available to subscribers daily, weekly or monthly as a computer tape service. ■

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Pensions & Investment Age

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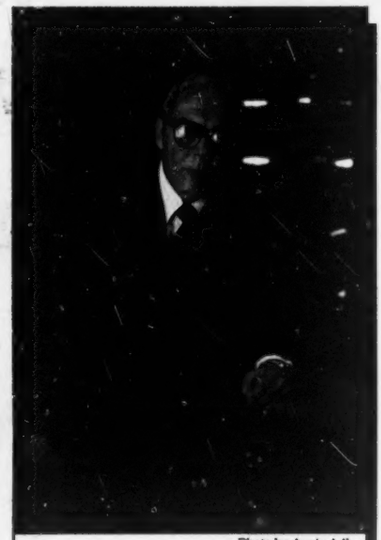

Photo by Arnie Adler

Ford Foundation is back on track

It has taken John English four years to bring the Ford Foundation's assets back above the $4 billion mark. He attributes the comeback to the bull market and a rebuilt in-house investment team. His story begins on page 72.

Secondary offering nets $130 million

U.S. Steel fund sells company's contribution of 1.25 million shares

By Marci Baker

NEW YORK — The $8 billion U.S. Steel & Carnegie Pension Fund netted almost $130 million earlier this month through a secondary public offering of 1.25 million shares of U.S. Steel preferred stock the fund held in its portfolio.

The secondary offering, rare among tax-exempt funds, consisted of half the stock U.S. Steel had contributed to the pension fund in lieu of cash in 1983.

The offering was for 1.25 million shares of $10.75 cumulative redeemable preferred stock, priced at $104 a share, and 2.975 million warrants, priced at 31.25 cents apiece.

About two years ago, the pension fund made a $79 million profit by selling 3.35 million shares of $12.75 convertible preferred that U.S. Steel had contributed to the fund in 1982. The company has since called in those shares.

The decline in interest rates prompted the latest offering, said Gary Glynn, president of the pension fund.

Preferred stock, like debt securities, typically increases in value in a declining rate environment. As a result, "the market for preferred issues has been strong," Mr. Glynn said. "We'd been thinking more seriously about selling some of the shares and decided the timing was right."

The preferred stock's offering price fetched a $4 a share premium over the $100 per-share par value of the securities. Total proceeds to the fund, after underwriting fees, were $129.4 million.

Mr. Glynn declined to say how the proceeds will be reinvested.

Although the preferred shares sold to the public were cumulative redeemable, the shares held by the fund were $10.75 exchangeable convertible cumulative preferred.

U.S. Steel contributed 2.5 million shares of those securities to the fund in 1983 in lieu of its cash contribution, Mr. Glynn said. The fund still holds 1.25 million shares. Mr. Glynn said it was too early to determine whether more shares will be sold if interest rates continue to drop.

Fund officials have agreed not to sell any additional shares for 60 days following the initial sale.

The exchangeable preferred gave any holder, other than the U.S. Steel pension fund itself, the right to exchange the stock for one share of $10.75 redeemable preferred, plus warrants to buy 2.38 shares of U.S. Steel common at $42 a share. The securities could be exchanged in this fashion until Sept. 14, 1988.

The pension fund was barred from the exchange option because "warrants are not equity securities" under the Employee Retirement Income Security Act, Mr. Glynn said. Non-cash corporate contributions have to be in the form of equity securities.

To complete the deal, the offering's underwriters purchased the exchangeable preferred shares, turned them in for the redeemable preferred and warrants, then reoffered those shares to the public. Salomon Brothers Inc., Morgan Stanley & Co. and Shearson Lehman Brothers Inc. underwrote the deal.

The investment bankers believed a secondary offering of the redeemable shares and warrants would have greater investor appeal than would a public offering of the convertible exchangeable shares, Mr. Glynn said.

"Ultimately, the purchasers of warrants are not the same as purchasers of preferred stock," said Martin Murrer, a vice president at Salomon.

As a result, the secondary offering could appeal to traditional buyers in both camps.

Given the relative complexity of the deal, it was well received in the market, Mr. Murrer said. Indeed, demand apparently was strong enough to increase the size of the offering. The initial prospectus proposed the offering of only 1 million shares of the redeemable preferred and 2.4 million warrants.

Mr. Murrer said that demand was sparked, in part, by the current scarcity of straight preferred issues. Most activity is in the variable-rate preferred area.

U.S. Steel can redeem the preferred starting in September 1988, at a redemption price of $100 a share plus accrued and unpaid dividends. Beginning September 1989, the com-

Continued on page 79

PBGC's deficit to rise under budget proposal

By Joel Chernoff

WASHINGTON — Even with a premium hike and legislative reforms, the Pension Benefit Guaranty Corp.'s deficit will continue to mount by $70 million to $100 million per year, said Kathleen Utgoff, the agency's executive director.

Those projections, built into the president's proposed budget for 1987, contrast sharply with earlier PBGC goals of erasing its deficit during a set time. In 1982, the agency projected a $6 premium would enable it to pay off its $170 million deficit in five years.

Now, with the deficit hovering at $1.3 billion, PBGC executives say current proposals only will slow the rate of growth of its liabilities.

"Given what we know now, it's very unlikely we can amortize the deficit," Ms. Utgoff said.

She also said there's no chance the Reagan administration will seek a higher premium for single-employer plans than $8.50 per participant contained in the pending budget reconciliation bill. Upping the amount would open up the entire package to revision, a prospect the administration seeks to avoid for fear of jeopardizing long-sought after reforms.

What's more, the administration is not backing off from its support for the bill. "I think that the bill should be passed," Ms. Utgoff said.

Continued on page 79

Late news

Mission, creditors sign

LOS ANGELES — Lawyers for Mission Insurance Group and its pension fund creditors have signed an agreement in principle that helps protect the pension funds' priority as creditors, according to an attorney for the funds.

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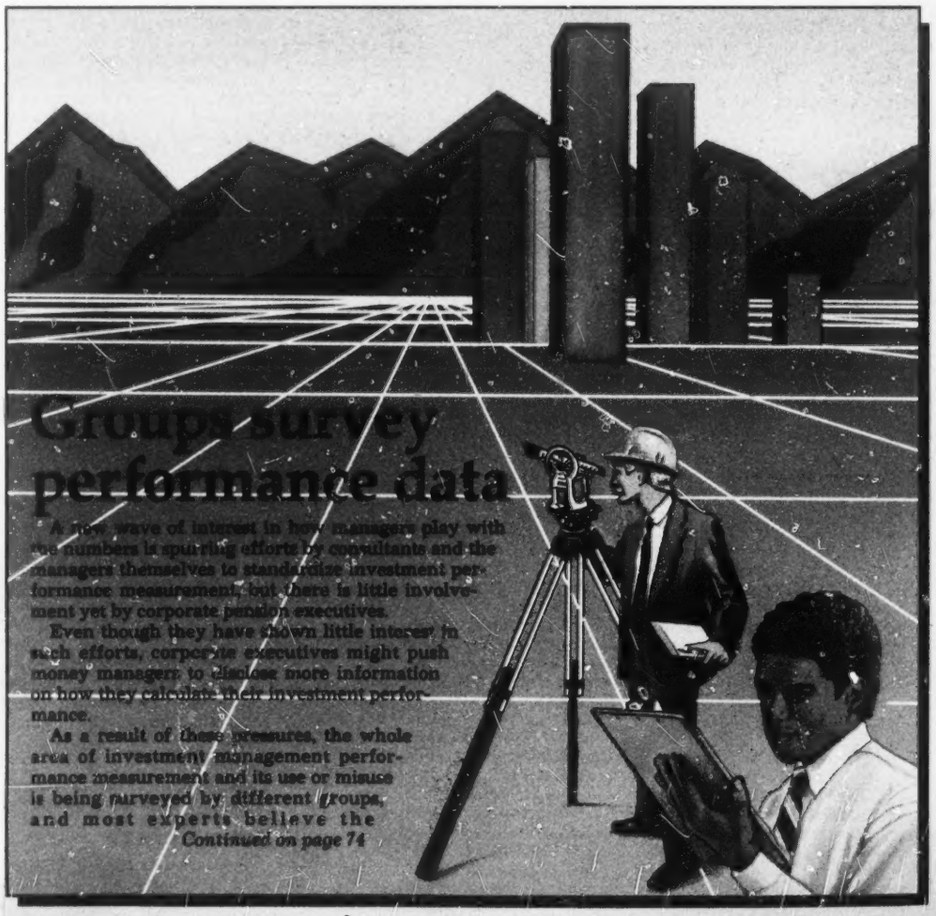

Groups survey performance data

A new wave of interest in how managers play with the numbers is spurring efforts by consultants and the managers themselves to standardize investment performance measurement, but there is little involvement yet by corporate pension executives.

Even though they have shown little interest in such efforts, corporate executives might push money managers to disclose more information on how they calculate their investment performance.

As a result of these pressures, the whole area of investment management performance measurement and its use or misuse is being surveyed by different groups, and most experts believe the

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The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* January indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	0.55	0.55	22.92
Russell 3000[1]	1.13	1.13	23.17
Ryan Index[2]	0.49	0.49	21.71
Shearson Lehman Gov't./Corp.[2]	0.59	0.59	19.4

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

Morgan Guaranty charges companies for deposit float

By Richard J. Gillespie

NEW YORK — In a move unrelated to its recently announced corporate restructuring, Morgan Guaranty Trust Co. has begun charging its corporate cash management and correspondent bank clients for deposit float.

Charging for deposit float appears to be the latest in a series of moves by Morgan to get out of less profitable cash management areas — especially the check-processing side — without losing its valued corporate clients.

Morgan is believed to be the only bank to have instituted such a policy on a permanent basis.

Morgan abandoned the lockbox business in 1982, and has been concentrating on more lucrative areas, including controlled disbursement, funds concentration, working capital management and loan syndications.

Michel Tilmant, vice president of Morgan's cash management operation, dismissed the speculation as "an opinion."

"This does not affect a lot of our organization. We don't think it is a big issue," Mr. Tilmant said.

Under the new policy, quietly instituted Jan. 1, corporations consistently depositing high-dollar checks into a Morgan account — thereby creating average daily deposit float in excess of $10 million — will be subject to a charge, reportedly 25 basis points.

Float arises when a payment is credited to one party before it has been debited from another, or vice versa. Deposit float comes from the time between when the check is deposited and funds are collected through the clearing system.

Mr. Tilmant said the policy affects only a "handful" of Morgan's customers.

Cash management

He said the charge will be negotiated with each client; bank officials are working with clients on alternative payment means when the average deposit float exceeds the allowable amount, he said.

A customer who receives payment by check might opt for a wire transfer payment to allay the charge, he said.

In all instances, payment forms are subject to negotiation, he said.

Interviews with 10 of Morgan's corporate customers produced only one who likely will be affected by the latest move. The others keep lower deposits or fund accounts with wire transfers.

Joe Bartosek, cash manager at Mueller Co., Decatur, Ill., said bank officials had informed him of the new policy by phone call and by letter.

"Our overall relationship had been longstanding and excellent so it is hard for me to react in a negative way to someone with whom I have had a very positive relationship over time," he said.

"They have been pulling out of cash management for several years now. They can't compete in that business," said Bob Russell, assistant treasurer of Quaker State Oil Refining Corp., Oil City, Pa.

"But it is a good bank otherwise. It is very strong," he said.

Harry Johnston, cashier with Archer Daniels Midland Co., Decatur, Ill., said, "I don't keep any deposits at Morgan because a three-star bank likes to charge for every star.

"If I had any deposits there that created float, and I do have other accounts there, I would not keep it there long if they started to charge me," he said.

At International Paper Co., New York, Tom Mathews, manager of cash management, said, "No experience with Morgan would surprise me." He said Morgan's fees are the highest in the industry. His firm does not use Morgan as an operat-

Continued on page 82

Chief investment officer, 2 others leave Rothschild; trio may launch own firm

By Rose Darby

NEW YORK — Daniel S. Kampel, chief investment officer, and at least two other investment professionals at L.F. Rothschild Asset Management have left following what one source called a "grand blowup."

The three now are using office space at Mabon, Nugent & Co., a Wall Street brokerage firm, while they finalize plans for a money management company, sources said.

Mr. Kampel reportedly left Rothschild in early February, along with Richard H. Wosczyk, vice president and senior portfolio manager, and Mr. Wosczyk's assistant, who was not identified.

Messrs. Kampel and Wosczyk were unavailable for comment.

"This was one of those grand blowups," said a source familiar with the situation. The conflict arose when executives of the parent company, concerned about a slowdown in the revenue stream due to lost business, confronted Mr. Kampel.

Mr. Kampel, said to have been integral in decision-making and client relations at the asset management unit, was with L.F. Rothschild, Unterberg, Towbin — the parent brokerage firm — for 22 years.

Rothschild's principals had been aware of Mr. Kampel's plans for a few weeks, according to Francois Mayer, chairman of Rothschild's executive committee and co-chief operating officer.

Mr. Mayer said senior-level professionals are now in charge at the asset management unit, including Alexander Bing, senior portfolio strategist and a partner, and Arthur H. Sheer, senior investment manager.

Mr. Sheer joined the firm four months ago to manage money and build account relationships, Mr. Mayer said. He previously was an analyst and portfolio manager for Fidelity Group's pension operation.

"You're not talking about a mass exodus here," said Mr. Mayer. "The continuity of our business is assured."

Continued on page 81

Expense of divestiture revealed

Cost would be higher in Wisconsin than in Michigan

By Trudy Ring

Divestiture of South Africa-related securities would be far more costly for Wisconsin's state pension funds than Michigan's, largely because of differences in investment styles and stock selection.

SEI Funds Evaluation Services, Chicago, recently completed separate studies of the $10.5 billion Michigan State Employees' Retirement Systems and the $10.8 billion Wisconsin Investment Board. Legislation calling for divestiture is pending in both states.

SEI concluded the present value of costs associated with divestiture over six years by the Wisconsin board would be $131 million, compared with the "surprisingly small" cost of $16.1 million for Michigan to divest over a five-year period. The Michigan study was co-authored by United States Trust Co. of Boston.

A discount rate of 12.3% was used in the calculation for Michigan, while 5% was used for Wisconsin.

But differences in the discount rate and the time period account for only a small part of the variance in costs. Using the 5% rate, Michigan's present value cost comes to $19.2 million. Using the 12.3% rate, Wisconsin's cost comes to $71.4 million over five years, $100.3 million over six years.

SEI officials said the rest of the discrepancy is due to differences in investment style and alpha, the consistent ability to pick stocks that outperform the market after adjusting for risk.

Michigan's equity investments are based on a top-down approach, meaning they depend more on market direction and sector selection than individual stock selection, said Ronald J. Surz, an SEI vice president who worked on both studies. Wisconsin's management takes a bottom-up approach, with stock selection of primary importance, he said. Both funds are managed in-house.

Therefore, Wisconsin's portfolio is more likely than Michigan's to have its performance impaired by restrictions on the stocks it can hold, Mr. Surz said. The divestiture costs estimated for Michigan are largely for transactions; the Wisconsin fund would incur about the same transaction costs, but larger opportunity costs reflected in investment performance.

Also, investment managers with a significantly positive alpha might

Continued on page 78

Crocker units' future unknown in purchase

By Steve Hemmerick

SAN FRANCISCO — Wells Fargo Investment Advisors, a giant among passive money managers with $30 billion in tax-exempt assets, soon might find itself with a sibling that manages $1.7 billion actively — Crocker Investment Management Co.

This corporate family of active and passive managers would result from Wells Fargo & Co.'s announced plans to buy Crocker National Corp. from Britain's Midland Bank for about $1.08 billion.

Wells Fargo dumped active management in 1982 on the grounds that passive management is better for institutional accounts. Some critics, mainly active managers, claimed it was because Wells Fargo had been unsuccessful at active management.

What Wells Fargo will do with Crocker Investment isn't clear.

Wells Fargo Investment Advisors is a division of Wells Fargo Bank, a subsidiary of Wells Fargo & Co.; Crocker Investment is a subCrocker Real Estate Investment Group or Crocker National Bank's trust department.

But Kim Kellogg, a spokesman for Wells Fargo, denied the rumor that Wells didn't buy one or the other of the two subsidiaries (Crocker Investment and Crocker Real Estate).

They are part of the deal, she said, but it's "too early to tell" if these operations will mesh or remain separate.

One of the biggest tax-exempt accounts of Crocker Investment, at $500 million, is the $1.6 billion Los Angeles Water & Power Employees' Retirement Plan. Kathleen Thorton, assistant retirement plan manager, said she has gotten only "sketchy information" so far on what might happen to Crocker Investment.

Betty Lanoue, retirement administrator for the $470 million Contra Costa County Employees' Retirement Association, Martinez, Calif., said the fund has $23 million invested with Crocker Investment and $22.5 million in a separate ac-

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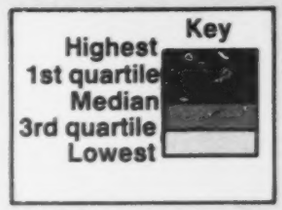
PIPER

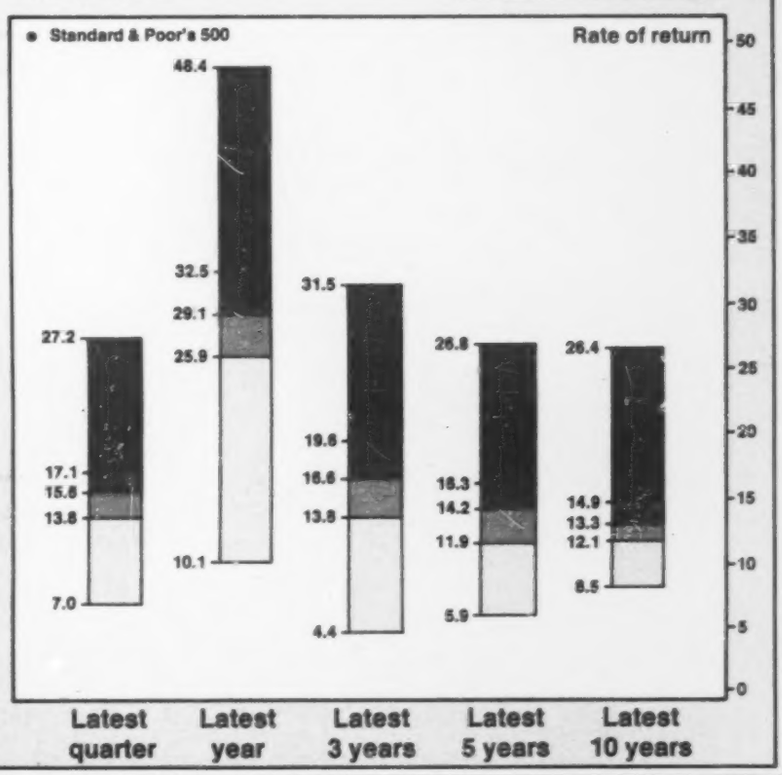
The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. *PIPER details comparative performance data on equity and fixed-income funds at more than 200 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

Pooled equity funds of banks and insurance companies.

All periods ending December 31, 1985, and all figures, except latest quarter, are annualized total returns.

PIPER report compiled by Rogers, Casey & Barksdale Inc.

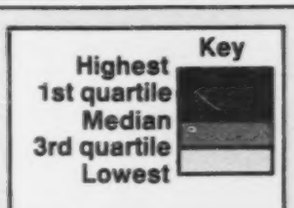


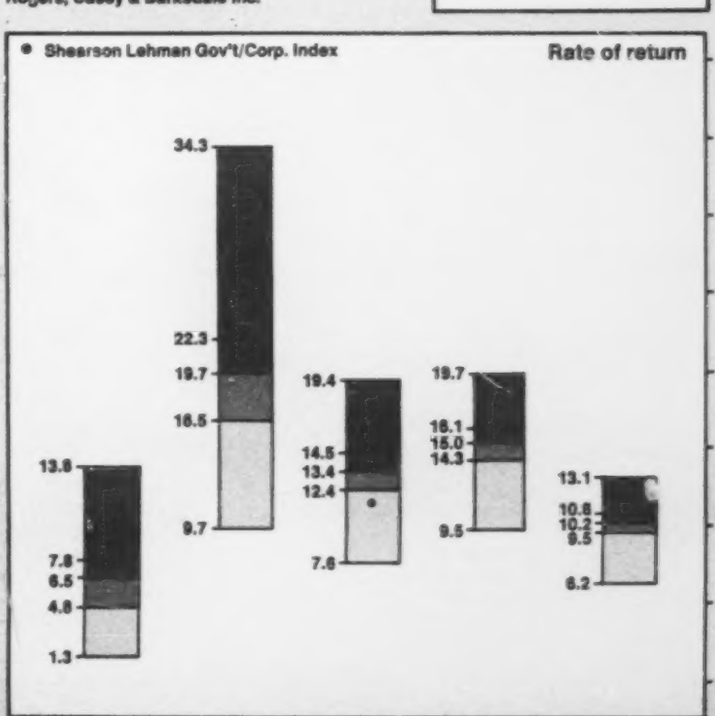


Pooled fixed-income funds of banks and insurance companies.

All periods ending December 31, 1985, and all figures, except latest quarter, are annualized total returns.

PIPER report compiled by Rogers, Casey & Barksdale Inc.





Large firms reassert dominance in equities

By Ed Christman

Big banks and insurance companies returned in force to the Top 25% of the PIPER universe of commingled equity funds in 1985.

Of the 65 funds in the top quartile for the year, 30 are managed by institutions with more than $1 billion in tax-exempt assets under management. Last year, of the 64 funds in the top quartile, only 19 were run by big institutions.

The top performer in Pensions & Investments' Performance Evaluation Report for the year was the New York Life Insurance Co., New York, with 48.4%, compared with 31.8% for the Standard & Poor's 500 stock index.

The chart-topping New York Life equity pool is managed by MacKay-Shields Financial Corp., New York, a subsidiary of the insurance company.

Following New York Life, the other top performers for the year were Sun Banks Inc., Orlando, Fla., 47.8%; Pioneer Bank & Trust Co., Chicago, 47.4%; MTrust, Fort Worth, Texas, 41.8%; and First National Bank of Neenah, Wis., 41.1%.

The New York Life commingled equity fund also chalked up the top performance, 25.3%, for the fourth quarter of 1985. Northern Central Bank, Williamsport, Pa., was next, with 21.9%, followed by Puget Sound National Bank, Tacoma, Wash., 21.1%; First of America Bank, Kalamazoo, Mich., 21%; and Guardian Life Insurance Co. of America, New York, 20.8%. The S&P 500 returned 17.2%.

Although New York Life has had a good track record for the past year, performance has not been as strong for the long term. For the five-year period ended Dec. 31, the fund had a compound annualized return of 14.3% (vs. 14.7% for the S&P 500), placing it in the fifth decile; and for the 10-year period the compound annualized performance was 12% (vs. 14.4% for the S&P), placing it in the eighth decile.

Kenneth R. O'Brien, senior vice president in charge of pension operations at New York Life, pointed out that the five- and 10-year performance numbers are deceiving because MacKay-Shields has only been running the fund since May 1984. Mr. O'Brien said MacKay-Shields employs a different investment style than New York Life used when it ran the fund.

Portfolio manager Christopher Lewis, managing director of MacKay-Shields, said he uses a growth, bottom-up approach for the $58 million fund.

Mr. Lewis starts out by looking for a favorable environment, then looks for companies with an earnings growth rate at least two to three times that of the S&P 500.

"The S&P 500 is expected to be 6% or 7% this year," he said. "Now, I am looking for companies that have at least a 30% earnings growth rate."

Of those companies, he looks for ones with some kind of edge, such as those with a patent or those holding dominent market share.

He likes companies growing very quickly that are customer oriented, innovative and good at motivating people.

Also, if management has a significant ownership stake, then not only are "they working for themselves, but I feel like they are working for me," he said.

Two areas primed for explosive growth are compact discs and video, he added.

The fund is invested in 22 stocks. Among good-performing stocks are **Telecredit Inc.**, **Liebermann Enterprises Inc.**, **Environmental Testing & Certification Corp.**, **CrossLand Savings FSB**, **Verdix Corp.** and **National Data Corp.**

Another large manager that landed in the top decile for the year is U.S. Trust Co. of New York, with a 36.8% performance.

The fund also was in the Top 10% for the three-year period ended Dec. 31, with a

Continued on page 25

Bond funds that 'go long' produce a winning season

By Trudy Ring

Many successful managers of bank and insurance company pooled bond funds in 1985 appear to have taken the same advice as a quarterback on 3rd-and-20 — "go long."

"Most bond managers that held intermediate to longer maturities did very well," said L. David Hale, senior vice president of Continental Investment Advisors Ltd., Richmond, Va.

"If you were very long, you probably did very, very well," added Rollin C. Woltjen, senior vice president of Centerre Trust Co., St. Louis.

Messrs. Hale and Woltjen know whereof they speak: Both work for firms that were among the leaders in the year-end Pensions & Investments' Performance Evaluation Report on more than 200 pooled fixed-income funds managed by banks and insurance companies.

The fund that Continental manages for a sister company, Life Insurance Co. of Virginia, in Richmond, was the top performer in the five- and 10-year periods, second for the three-year period and in the top decile for 1985 and the fourth quarter.

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million at year end, is made up of issues with an average maturity of 10 years and average quality of A+, Mr. Hale said. It consists almost exclusively of corporate bonds, mostly those with sinking fund provisions, meaning the issuer is obligated to retire a certain amount each year.

"The sinking fund sector, for us, has been very rewarding," Mr. Hale said. "It's done very well for us over the years and it continues to do well."

For the 10-year period, the fund had a compound annual return of 13.1%, compared with 10.4% for the Shearson Lehman Government/Corporate bond index. Its five-year compound annual return was 19.7%, compared with 16.2% for the index.

The three-year compound annual return was 18.8%, compared with 14.6% for the index.

The return for 1985, when the fund ranked eighth in PIPER, was 27.9%, compared with 21.3% for the index. The fourth-quarter return was 10.1%, with the fund ranking 13th in PIPER and again outperforming the index, which gained 7.6%.

Centerre's bond portfolio managers went with longer

Equity performance

cumulative periods ending 12/31/85

	No. of years			
	1	5	10	DCR
	%			
Aetna Life & Cas., Conn.	27.3	15.1	16.6	2
Allied Bank, Texas	24.4	11.0	11.7	9
American Fletcher, Ind.	37.1	16.0	12.8	7
American Natl. (Eq. fund), Minn.	29.9	8.0	10.4	10
American Natl. Bank, Ind.	26.6	15.6	12.7	7
American Natl. Bank (Growth), Ind.	22.0	13.5	12.1	8
American Natl. Bank, Tenn.	26.3	14.3	12.7	7
American Natl., (Active), Chicago	36.6	20.4	(1)	—
American Natl., (S&P 500), Chicago	32.3	14.8	14.1	4
American Security, D.C.	16.8	12.8	12.1	8
Ameritrust, Ohio	32.9	16.7	13.8	5
AmSouth, Ala.	20.7	21.0	18.1	1
Associated Kellogg, Wis.	27.4	11.8	12.1	8
Associated Manitowoc, Wis.	26.7	15.6	9.6	10
BancTexas, Dallas	25.7	13.2	12.9	7
Bank of Calif. (Inc./Growth)	33.7	15.3	12.2	8
Bank of Calif. (Income)	32.3	(1)	(1)	—
Bank of Delaware	20.8	13.7	13.9	5
Bank of New England	31.4	(1)	(1)	—
Bank of Oklahoma, Tulsa	21.6	12.8	14.9	3
Bank of the West, Calif.	27.1	(1)	(1)	—
Bank of Tokyo, N.Y.	33.0	17.2	15.1	3
Bank One Trust, Columbus, Ohio	26.3	11.2	10.3	10
Bankers Life, Iowa	33.7	15.7	18.2	1
Bankers Trust, N.Y.	31.2	13.3	13.4	5
Bankers Trust (Index), N.Y.	32.4	15.2	(1)	—
Barnett Banks Trust Co., Fla.	35.4	17.8	(1)	—
Bessemer Trust, N.Y.	28.7	13.1	18.0	1
Beverly Bank, Ill.	18.6	7.5	12.6	7
Boatmen's FNB, K.C., Mo.	27.5	14.2	11.7	9
Boatmen's National, Mo.	26.8	12.1	10.3	10
Boston Safe Deposit, Mass.	28.8	15.9	12.2	8
Branch Bank & Trust, N.C.	32.1	13.7	(1)	—
Calcasieu Marine Natl., La.	10.1	(1)	(1)	—
Centerre Trust, Mo.	28.5	16.8	13.4	6
Central Bank, Denver	19.6	9.7	10.3	10
Central Bank, Monroe, La.	26.3	(1)	(1)	—
Central Fidelity, Va.	33.4	14.9	14.4	4
Chase Manhattan, N.Y.	26.6	16.1	13.2	6
Chemical Bank (No. 1), N.Y.	25.7	9.5	13.0	6
Chemical Bank (No. 2), N.Y.	33.4	(1)	(1)	—
Chicago Title & Trust	28.8	14.7	15.4	3
CIGNA Corp., Conn.	29.0	12.6	14.7	3
Citicorp, N.Y.	27.7	12.7	13.5	5
Citizens Chillicothe, Mo.	34.8	7.4	20.0	1
Citizens Fidelity, Ky.	30.5	13.6	14.0	4
Citizens & Southern, Ga.	26.7	9.5	12.0	8
Citytrust, Conn.	30.8	16.7	15.2	3
CNA Insurance, Ill.	32.8	12.6	11.9	8
Colorado National Bank	30.7	17.8	15.9	2
Comerica Bank, Mich.	30.0	12.5	12.4	7
Commerce Bank, K.C., Mo.	23.3	14.0	10.8	10
Commonwealth Natl., Pa.	30.5	14.9	14.1	4
Confederation Life, Ont.	32.7	18.1	18.6	1
Connecticut Bank & Trust	36.4	15.0	13.7	5
Connecticut Mutual Life	26.1	18.6	14.5	4
Connecticut National Bank	24.9	10.2	11.9	8
Continental Bank, Pa.	38.5	14.6	16.2	2
Continental Illinois	28.7	10.8	11.5	9
County Bank of St. Louis	28.1	13.2	12.0	8
Crocker National, Calif.	31.7	10.7	13.0	6
Crown Life, Ont.	23.6	8.0	13.0	6
Cullen Bank, Texas	32.5	15.6	(1)	—
Dauphin Deposit, Pa.	30.4	18.9	(1)	—
Dominion Trust, Va.	29.2	18.6	(1)	—
Employers Life of Wausau, Wis.	22.4	12.2	16.3	2
Equitable Bank, Md.	20.5	11.7	14.3	4
Equitable Life (No. 1), N.Y.	26.3	11.4	13.1	6
Equitable Life (No. 4), N.Y.	32.7	14.0	16.6	2
Fidelity Bank, Pa.	35.5	12.8	11.2	9
Fidelity Mgmt. Trust, Mass.	25.7	(1)	(1)	—
Fidelity National, La.	29.8	14.7	(1)	—
First Alabama Bank, Ala.	22.4	17.0	12.6	7
First Alabama, Mobile	25.2	15.5	13.1	6
First Bank Milwaukee, Wis.	28.1	16.3	13.1	6
First Citizens, N.C.	27.8	16.4	(1)	—
First City Dallas	27.5	11.8	10.6	10
First City Natl., Houston	26.5	12.6	13.6	5
First Fidelity (Disc.), N.J.	26.6	22.2	(1)	—
First Fidelity (EB), N.J.	33.4	14.0	14.2	4
First in Bartlesville, Okla.	26.5	15.9	13.3	6
First Interstate Billings, Mont.	22.5	(1)	(1)	—
First Interstate of Ariz.	34.4	12.5	12.2	8
First Interstate of Calif.	19.4	7.1	10.7	10
First Interstate of Denver	36.7	14.1	17.8	1
First Interstate of Wis.	24.4	9.4	(1)	—
First Jersey Natl., N.J.	35.2	15.6	16.0	2
First Kentucky Trust	37.7	15.4	14.0	4
First Midwest, Moline, Ill.	25.1	9.2	12.8	7
First Natl., Lincoln, Neb.	29.3	15.3	15.3	3
First Natl. of Tulsa	28.5	9.4	10.7	10
First of America (Cap. G.), Mich.	29.4	(1)	(1)	—
First of America, Mich.	32.5	18.6	17.1	1
First of Boston	34.1	(1)	(1)	—
First of Chicago	21.7	13.6	12.6	7
First of Cincinnati	28.6	13.6	11.7	9
First of Elgin (Fund A), Ill.	19.5	(1)	(1)	—
First of Elgin (Fund C), Ill.	23.3	11.1	(1)	—
First of Kenosha, Wis.	25.1	8.5	13.7	5
First of Maryland	30.6	13.1	14.2	4
First of Maryland (Income)	28.6	(1)	(1)	—
First of Minneapolis	27.0	9.1	11.3	9
First of Mobile, Ala.	31.7	12.4	12.9	6
First of Neenah, Wis.	37.8	16.0	14.3	4
First of Neenah, Wis.	41.1	13.0	14.7	3
First of Oklahoma	29.6	18.7	17.4	1
First of Omaha, Neb.	31.9	19.7	17.7	1
First of Penna, Erie	22.4	7.1	11.5	9
First of Shreveport, La.	32.1	10.3	(1)	—
First of Toledo	30.8	9.6	10.0	10
First of Warsaw, Ind.	28.9	16.9	14.1	4
First Pennsylvania Bank	31.0	17.2	14.2	4
First Security Natl., Ky.	32.6	17.7	(1)	—
First Tennessee, Chat.	19.6	16.1	14.7	3
First Tennessee, Memphis	30.8	16.0	14.5	4
First Trust St. Paul	21.0	13.8	13.4	5
First Union Bank, N.C.	25.9	23.7	18.0	1
First United Trust, Ill.	29.2	11.4	11.0	10
First Variable Life, Ark.	21.5	22.8	20.1	1
First Wis. Natl., Madison	32.7	19.5	20.8	1
First Wis. Trust (Div.)	22.2	13.0	11.6	9
First Wis. Trust (Income)	26.0	18.9	14.1	4
Frost National, Texas	32.5	10.7	9.5	10
Gary Wheaton Bank, Ill.	28.5	16.7	13.4	5
General American, Mo.	26.5	11.8	9.5	10
Genesee Merchants, Mich.	24.3	12.7	11.8	9
Great West Life, Manitoba	30.6	14.5	12.5	7
Greeley Natl., Colo.	26.4	8.6	11.6	9
Guardian Insurance, N.Y.	33.6	21.2	22.2	1
Hamilton Bank, Pa.	26.9	13.5	13.4	5
Harris Trust (Common), Ill.	28.1	11.4	12.9	6
Harris Trust (Low p/e), Ill.	34.3	(1)	(1)	—
Hawaiian Trust	29.2	10.5	12.2	8
Hibernia Natl., La.	28.1	11.3	12.7	7
Home Life, N.Y.	33.4	12.4	16.0	2
HT Investors, R.I.	23.8	14.7	13.2	6
IAA Trust, Ill.	32.3	15.9	15.6	2
Indiana Natl. Bank	28.0	10.4	11.8	8
Interfirst Bank, Dallas	24.6	12.2	12.9	6
Interfirst Bank (Inc.), Dallas	35.8	(1)	(1)	—
Irving Trust, N.Y.	23.0	14.9	12.0	8
Jefferson Trust, Ill.	20.3	15.3	12.7	7
John Hancock (1K), Mass.	31.2	14.9	(1)	—
John Hancock (1L), Mass.	36.3	(1)	(1)	—
Key Trust Co., N.Y.	25.7	13.0	12.4	7
Lake Shore Natl., Ill.	30.3	19.5	14.9	3
Landmark First Natl., Fla.	29.3	15.3	13.4	5
Landmark Union Trust, Fla.	26.5	18.0	17.3	1
LaSalle Natl. (Core), Ill.	31.3	(1)	(1)	—
LaSalle Natl. (Int. Val.), Ill.	31.4	(1)	(1)	—
Liberty Natl., Ky.	29.3	(1)	(1)	—
Liberty Natl., Okla.	32.9	15.3	15.5	3
Lincoln National, Ind.	—	16.1	13.4	5
Lincoln Natl. Pens., Ind.	30.7	(1)	(1)	—
Lloyds Bank, Calif.	30.3	13.1	11.4	9
Long Island Trust, N.Y.	20.9	9.8	11.6	9
Manufacturers Detroit	35.6	20.6	16.7	2
Manufacturers Hanover, N.Y.	28.4	9.7	12.2	8
Manufacturers Life, Ont.	29.4	23.4	26.4	1
Marine Bank, Pa.	27.2	12.5	(1)	—
Marine Midland, N.Y.	32.2	(1)	(1)	—
Marquette Bank, Minn.	26.0	6.9	9.2	10
Maryland National	24.7	9.6	10.1	10
Massachusetts Mutual	30.3	18.5	16.7	2
MBank, Austin, Texas	25.7	5.9	10.1	10
Mellon Bank, Pa.	34.2	14.6	12.3	7
Mercantile Natl., Ind.	20.6	(1)	(1)	—
Mercantile Safe, Md.	29.0	16.1	13.7	5
Mercantile Trust, Mo.	26.1	14.6	13.4	5
Merchants Natl. (No. 1), Ind.	34.9	14.1	12.4	7
Mich. Natl. of Detroit	24.8	11.7	8.9	10
Mich. Natl. of Grand Rapids	24.5	12.5	9.7	10
Midlantic Natl., N.J.	24.4	18.9	(1)	—
Mid-State Bancorp, Pa.	31.4	17.6	(1)	—
Minnesota Mutual	16.3	16.3	14.3	4
Morgan Guaranty, N.Y.	33.1	14.5	(1)	—
MTrust, Fort Worth	41.8	20.0	17.5	1
MTrust, Texas	30.2	15.4	17.1	2
Mutual Benefit, N.J.	30.9	19.5	14.8	3
Mutual of New York	25.5	11.1	11.3	9
Mutual Service Life, Minn.	25.2	(1)	(1)	—
Natl. Bank of Detroit	28.9	12.3	11.2	9
Natl. Bank of Commerce, Neb.	26.5	13.2	16.7	2
Natl. Bank of Commerce, Tenn.	30.5	17.6	(1)	—
Natl. City Cleveland	35.1	16.1	15.8	2
Natl. of Georgia	27.9	13.4	(1)	—
NCNB National, N.C.	25.9	7.9	12.5	7
New England Mutual	24.4	13.4	13.0	6
New England Mutual (Sep. Cap)	36.8	18.7	17.1	2
New Jersey Natl.	40.0	17.1	14.1	4
New York Life Ins.	48.4	14.3	12.0	8
Northern Central, Pa.	40.1	(1)	(1)	—
Northern Trust (Con. eq.), Ill.	21.1	11.1	14.3	4
Northern Trust (Div. eq.), Ill.	27.3	12.8	12.2	8
Norwest Bank, Minn.	31.1	12.6	13.3	6
Old Kent, Mich.	34.7	17.0	13.4	5
Old Second Natl., Ill.	30.5	11.1	12.9	6
Omaha Natl. Bank, Neb.	35.2	9.9	13.8	5
Oregon Bank	29.1	13.1	13.2	6
Pacific Mutual, Calif.	30.2	7.5	12.0	8
Penn Mutual Life, Pa.	30.3	14.4	16.1	2
Philadelphia Natl.	37.0	15.0	14.9	3
Phoenix Mutual, Conn.	26.5	14.5	14.6	3
Pioneer Bank, Ill.	47.4	19.4	(1)	—
Pittsburgh Natl. (Comb. tr.)	34.8	13.5	15.0	3
Pittsburgh Natl.	25.8	9.2	(1)	—
Pittsburgh Natl. (Grp. tr.)	32.4	13.6	(1)	—
Planters Natl., N.C.	22.3	13.7	(1)	—
Provident Bank, Ohio	21.7	10.0	12.1	8
Provident Natl., Pa.	28.7	19.2	18.3	1
Prudential (No. 5,000), N.J.	31.0	13.5	(1)	—
Prudential (Low p/e), N.J.	31.1	19.7	(1)	—
Prudential (VCA No. 9), N.J.	29.0	10.6	13.2	6
Puget Sound Natl., Wash.	37.1	11.9	11.6	9
Republic Natl., Dallas	34.6	16.5	14.6	3
Resource Bank & Trust, Minn.	27.5	22.0	(1)	—
Riggs of Washington	33.6	14.2	12.1	8
Seafirst Bank, Wash.	26.6	8.9	12.2	8
Seattle Trust, Wash.	36.8	17.6	13.3	6
Security Natl., W. Va.	27.3	(1)	(1)	—
Security Pacific, Calif.	28.5	(1)	(1)	—
Sentry Life, Wis.	30.5	14.3	13.9	5
Shawmut Bank, Mass.	30.6	17.4	(1)	—
Society National, Ohio	36.2	17.1	14.6	3
Southeast Bank NA, Fla.	25.6	15.7	13.2	6
Sovran Bank, Va.	30.1	15.5	12.7	7
State Natl., Evanston, Ill.	34.6	16.3	16.9	2
State Street Bank, Mass.	33.0	16.4	13.4	5
State Street Bank (S&P 500), Mass.	31.7	14.7	(1)	—
State Street Bank (Value), Mass.	33.2	(1)	(1)	—
Summit Bank, Ind.	32.8	16.1	11.6	9
Summit Trust Co. N.J.	39.4	13.8	8.5	10
Sun Bank, Fla.	47.8	26.8	17.3	1
Texas American Bank	26.4	10.3	14.6	3
Texas Commerce	31.8	16.4	15.2	3
Third Natl., Nashville	19.1	9.9	11.6	9
Toledo Trust, Ohio	29.4	13.8	11.3	9
Travelers, Conn.	23.7	9.4	12.8	7
Trust Co. of Georgia	24.1	11.4	12.5	7
Trust Svcs of Amer., Calif.	30.5	12.5	13.9	5
Unibanctrust, Ill.	26.4	11.1	14.3	4
Union Central, Ohio	22.0	16.9	14.5	4
Union Natl., Wichita, Kan.	19.4	10.1	(1)	—
Union Trust, Baltimore	27.0	13.4	13.5	5
United Carolina Bank, N.C.	24.5	16.7	(1)	—
United Missouri, K.C.	27.2	15.2	13.0	6
United of Denver	27.6	21.0	16.3	2
United Virginia Bank	21.2	16.3	15.1	3
US Natl. of Galveston	33.1	20.6	20.3	1
US Natl. of Oregon	26.7	17.7	19.2	1
US Trust, N.Y.	36.8	13.6	11.2	10
Valley Fidelity, Tenn.	31.3	14.5	15.3	3
Valley Natl., Ariz.	37.1	13.4	11.3	9
Wheeling Dollar Bank, W. Va.	30.4	17.3	15.5	2
Wilmington Trust, Del.	30.2	13.3	12.7	7

Fixed-income performance

cumulative periods ending 12/31/85

	No. of years			
	1	5	10	DCR
	%			
Aetna Life & Cas., Conn.	24.6	(1)	(1)	—
Allied Bank, Texas	14.9	16.7	11.0	2
American Fletcher, Ind.	19.3	14.3	9.8	7
American Fletcher (inter.), Ind.	15.3	12.9	9.4	9
American National, Minn.	21.8	15.9	(1)	—
American Natl. Bank, Ind.	15.7	13.7	10.5	4
American Natl. Bank (Income), Ind.	13.5	11.7	9.8	7
American Natl. Bank, Tenn.	20.2	16.1	11.1	2
American Natl., Chicago	20.2	15.8	10.5	4
American Security, D.C.	24.3	17.6	11.9	1
Ameritrust (Fixed), Ohio	18.3	15.0	9.9	7
Ameritrust (Reserve), Ohio	12.8	13.7	10.7	4
AmSouth, Ala.	25.3	16.7	8.9	10
AmSouth (Lim. mat.), Ala.	10.9	13.3	(1)	—
Associated Kellogg, Wis.	16.0	14.3	9.9	7
Associated Manitowoc, Wis.	19.7	16.7	10.6	4
BancTexas, Dallas	20.0	14.3	9.9	7
Bank of California	23.2	16.6	10.5	4
Bank of New England	23.5	16.3	11.1	2
Bank of Oklahoma, Tulsa	16.8	14.7	9.5	8
Bank of Tokyo, N.Y.	19.7	(1)	(1)	—
Bankers Life, Iowa	24.5	(1)	(1)	—
Bankers Trust (Fund A), N.Y.	23.5	17.2	10.8	3
Bankers Trust (Fund B), N.Y.	18.7	14.8	10.7	3
Bessemer Trust, N.Y.	24.0	14.6	10.7	4
Beverly Bank, Ill.	23.6	17.6	12.7	1
Boatmen's FNB, K.C. Mo.	18.3	15.2	(1)	—
Boatmen's National, Mo.	20.8	14.8	11.3	2
Calcasieu Marine Natl., La.	11.3	(1)	(1)	—
California First Bank	19.3	16.1	10.9	3
Centerre Trust, Mo.	32.5	18.5	12.2	1
Central Bank Denver	9.7	9.6	7.5	10
Central Bank Monroe, La.	15.2	(1)	(1)	—
Central Fidelity, Va.	20.5	17.2	12.1	1
Chase Manhattan, N.Y.	22.6	14.3	9.6	8
Chase Manhattan, N.Y.	24.6	(1)	(1)	—
Chemical Bank (No. 1), N.Y.	23.5	14.5	9.5	8
Chemical Bank (No. 2), N.Y.	22.3	(1)	(1)	—
Chicago Title & Trust	21.6	14.7	10.2	6
CIGNA Corp. (Inter.), Conn.	21.9	17.7	(1)	—
CIGNA Corp. (Pub. Trade), Conn.	23.3	16.3	10.9	3
Citicorp, N.Y.	25.2	17.3	10.9	3
Citizens Fidelity, Ky.	19.1	14.7	10.5	4
Citizens & Southern, Ga.	17.4	14.7	8.6	10
Citytrust, Conn.	20.9	15.5	10.2	6
Colonial Amer. Natl., Va.	23.2	17.0	10.6	4
Colorado Natl. Bank	22.6	16.3	10.5	4
Comerica Bank (Com.), Mich.	24.1	14.7	10.3	5
Comerica Bank (Int.), Mich.	16.0	(1)	(1)	—
Commerce Bank, K.C., Mo.	25.3	14.9	9.7	7
Commerce Union, Tenn.	21.8	16.4	11.4	2
Commonwealth Natl., Pa.	11.1	14.3	9.8	7
Confederation Life, Ont.	20.8	15.4	9.4	9
Connecticut Bank & Trust	17.5	12.8	8.1	10
Connecticut Natl. Bank	29.0	17.8	10.9	3
Connecticut Natl. Bank (Int.)	24.4	(1)	(1)	—
Continental Bank, Pa.	17.5	11.4	8.6	10
Continental Illinois	22.6	13.1	9.1	10
County Bank of St. Louis	17.0	14.4	10.0	6
Crocker National, Calif.	23.1	17.1	10.9	3
Crown Life, Ont.	21.1	14.9	9.2	9
Cullen Bank, Texas	18.6	16.7	11.1	2
Dauphin Deposit (Corp.), Pa.	20.7	15.1	(1)	—
Dauphin Deposit (Short Term), Pa.	11.5	(1)	(1)	—
Equitable Bank, Md.	18.5	12.7	9.5	8
Equitable Life, N.Y.	23.9	14.8	8.9	10
Exchange Natl. Bank, Ill.	22.6	15.6	10.2	6
Fidelity Bank, Pa.	24.1	16.6	12.1	1
Fidelity National, La.	16.2	15.1	(1)	—
First Alabama, Mobile	20.0	16.4	10.3	5
First Bank Milwaukee	19.4	16.3	10.6	4
First Citizens, N.C.	13.1	12.9	(1)	—
First City Dallas	18.4	14.9	9.7	8
First City Natl., Houston	22.5	14.6	9.6	8
First Fidelity Bank, N.J.	16.1	15.3	9.3	9
First Fidelity Bank (Inter.), N.J.	16.9	15.6	11.5	1
First in Bartlesville, Okla.	13.9	13.7	10.6	4
First Interstate of Ariz.	24.9	17.1	11.4	2
First Interstate of Calif.	23.4	17.2	12.0	1
First Interstate of Denver	30.2	18.0	11.0	2
First Interstate of Nevada	27.0	16.6	(1)	—
First Interstate of Oregon	19.7	14.9	10.3	5
First Interstate of Wash.	20.5	15.4	10.1	6
First Interstate of Wis. (Inc.)	18.0	(1)	(1)	—
First Interstate of Wis. (Mtg.)	11.5	13.5	(1)	—
First Jersey Natl., N.J.	23.3	16.7	12.5	1
First Kentucky Trust	23.1	18.1	11.4	2
First Midwest, Moline, Ill.	17.5	15.7	10.5	4
First Natl., Jackson, Miss.	14.5	14.1	(1)	—
First Natl., Lincoln, Neb.	21.7	15.6	10.3	5
First Natl. of Tulsa, Okla.	17.3	14.2	9.5	8
First of America, Mich.	18.4	12.6	9.2	10
First of Boston	21.2	15.6	9.2	9
First of Chicago	24.4	16.6	10.6	4
First of Cincinnati	19.9	15.3	9.7	7
First of Cincinnati (Int.)	14.4	(1)	(1)	—
First of Elgin (Fund D), Ill.	11.3	12.3	(1)	—
First of Elgin (Fund D1), Ill.	13.5	13.3	(1)	—
First of Kenosha, Wis.	11.6	9.5	6.2	10
First of Maryland	20.7	16.7	10.8	3
First of Minneapolis	17.0	13.9	9.2	9
First of Mobile, Ala.	16.6	14.7	9.6	8
First of Neenah (Int.), Wis.	15.8	13.7	10.7	3
First of Neenah (Long Term), Wis.	16.7	15.0	11.0	2
First of Neenah (Mtg.), Wis.	18.9	15.9	(1)	—
First of Oklahoma	18.7	12.8	8.4	10
First of Omaha, Neb.	22.6	16.6	10.3	5
First of Penna, Erie	15.3	14.6	10.5	4
First of Shreveport, La.	19.5	14.8	(1)	—
First of Toledo	15.0	15.2	10.5	4
First of Warsaw, Ind.	15.3	15.8	10.5	4
First Pennsylvania Bank	18.7	10.2	9.5	8
First Security Natl., Ky.	15.4	(1)	(1)	—
First Tennessee, Chat.	14.3	13.2	9.4	9
First Tennessee Memphis	19.2	14.6	9.8	7
First Trust St. Paul	18.9	15.0	10.0	6
First Union Bank, N.C.	17.5	14.6	9.7	7
First Union Bank (Fund 1), N.C.	22.2	(1)	(1)	—
First United Trust Co. Ill.	17.0	14.9	9.3	9
First Variable Life, Ark.	21.0	17.5	(1)	—
First Wis. Natl., Madison	20.4	17.0	11.3	2
First Wis. Trust (Int.)	19.4	14.1	9.4	9
First Wis. Trust (Pas.)	15.6	(1)	(1)	—
Frost National, Texas	20.6	15.3	(1)	—
Gary Wheaton Bank, Ill.	17.8	15.3	10.2	6
General American (No. 8), Mo.	25.4	(1)	(1)	—
General American (No. 9), Mo.	21.8	(1)	(1)	—
Genesee Merchants, Mich.	17.5	15.6	10.3	5
Greeley National, Colo.	19.4	14.5	10.2	5
Hamilton Bank, Pa.	20.5	16.4	(1)	—
Harris Trust, Ill.	22.9	14.4	9.2	9
Harris Trust (Gain), Ill.	17.7	(1)	(1)	—
Hawaiian Trust	27.4	15.3	10.2	6
Hawaiian Trust (Def.)	10.8	(1)	(1)	—
Hibernia National, La.	21.0	15.8	12.1	1
Home Life, N.Y.	16.5	(1)	(1)	—
HT Investors, R.I.	20.8	14.4	9.3	9
HT Investors (Fund A), R.I.	18.2	(1)	(1)	—
IAA Trust Co. Ill.	23.1	16.6	10.4	5
Indiana National Bank	21.0	15.9	10.8	3
Interfirst Bank, Dallas	21.2	15.7	10.0	6
Interfirst Bank (Int.), Dallas	15.3	14.1	(1)	—
Irving Trust, N.Y.	19.7	15.8	10.3	5
Jefferson Trust, Ill.	17.0	13.6	11.4	2
John Hancock, Mass.	23.5	16.8	11.1	2
Key Trust Co., N.Y.	21.2	16.6	10.9	2
Lake Shore Natl., Ill.	13.5	14.0	9.5	8
Landmark First Natl., Fla.	19.7	14.9	9.6	8
Landmark Union Trust, Fla.	16.5	15.2	10.2	5
LaSalle Natl. (Int.), Ill.	20.5	13.5	9.5	9
LaSalle Natl. (Long Term), Ill.	28.0	(1)	(1)	—
Liberty National, Ky.	22.3	15.8	9.8	7
Liberty National, Okla.	17.8	15.3	9.3	9
Life of Virginia	27.9	19.7	13.1	1
Lincoln Natl. Pens., Ind.	21.5	(1)	(1)	—
Lloyds Bank, Calif.	21.6	17.4	11.1	2
Long Island Trust, N.Y.	13.5	12.7	(1)	—
Manufacturers Detroit	24.0	16.3	11.4	2
Manufacturers Detroit (Fund H)	15.5	(1)	(1)	—
Manufacturers Hanover, N.Y.	21.9	16.0	11.7	1
Manufacturers Life, Ont.	28.2	13.2	(1)	—
Marine Bank, Pa.	16.5	14.5	(1)	—
Marine Midland, N.Y.	20.2	16.9	10.1	6
Maryland National	23.1	13.6	9.0	10
Maryland National (II)	18.1	15.0	(1)	—
Massachusetts Mutual	22.9	14.8	10.5	4
MBank, Austin, Texas	17.5	15.1	10.9	3
Mellon Bank, Pa.	21.9	17.4	11.0	2
Mercantile National, Ind.	16.0	(1)	(1)	—
Mercantile Safe, Md.	18.0	14.6	10.1	6
Mercantile Safe (Int.), Md.	15.3	14.2	(1)	—
Mercantile Trust, Mo.	20.7	16.0	11.5	1
Merchants Natl. (EB), Ind.	17.8	14.5	10.3	5
Merchants Natl., Pa.	19.7	15.3	10.8	3
Metropolitan Life, N.Y.	25.8	(1)	(1)	—
Michigan Natl. of Detroit	16.4	13.2	(1)	—
Mich. Natl. of Grand Rapids	18.3	14.9	9.4	9
Midlantic Natl., N.J.	19.0	15.3	10.4	5
Mid-State Bancorp, Pa.	15.0	14.7	(1)	—
Minnesota Mutual	20.3	15.0	10.4	5
Morgan Guaranty, N.Y.	23.5	16.7	(1)	—
MTrust, Texas	22.2	14.8	9.2	9
Mutual of N.Y. (Private place)	20.2	17.9	(1)	—
Mutual of N.Y. (Public)	21.5	16.6	(1)	—
Natl. Bank of Detroit	21.6	15.6	10.3	5
Natl. Bank of Commerce, Neb.	24.0	15.9	9.9	7
Natl. Bank of Commerce, Tenn.	20.5	15.3	(1)	—
Natl. City Cleveland	23.3	15.2	9.8	7
Natl. of Georgia	17.6	15.2	(1)	—
NCNB Natl. Bank, N.C.	19.8	14.3	10.5	4
New England Mutual, Mass.	20.3	14.6	8.9	10
New Jersey National	12.5	10.9	7.6	10
Northern Central, Pa.	17.6	14.3	(1)	—
Northern Trust, Ill.	22.3	15.3	10.0	7
Northern Trust (Int.), Ill.	13.2	14.8	(1)	—
Norwest Bank, Minn.	20.0	14.7	9.7	7
Old Kent, Mich.	13.3	13.6	9.0	10
Old Second Natl., Ill.	17.8	14.8	(1)	—
Old Second Natl, (No. 10), Ill.	15.8	14.5	(1)	—
Omaha Natl. Bank, Neb.	22.4	12.5	8.3	10
Oregon Bank	20.1	15.6	10.9	3
Pacific Mutual, Calif.	22.4	17.3	12.6	1
Philadelphia Natl., Pa.	21.1	15.4	10.2	6
Pioneer Bank, Ill.	12.1	15.0	(1)	—
Pittsburgh Natl., Pa.	17.0	14.7	(1)	—
Provident Natl., Pa.	22.0	15.7	10.2	6
Prudential (VCA 7) (Active), N.J.	20.0	14.6	10.3	5
Prudential (VCA 8) (Int. bd.), N.J.	15.8	(1)	(1)	—
Puget Sound Natl., Wash.	11.5	13.5	9.5	8
Republic Natl., Dallas	27.0	15.1	9.6	8
Riggs of Washington	18.9	15.8	10.8	3
Seafirst Bank, Wash.	21.5	17.0	12.1	1
Seattle Trust, Wash.	12.3	13.1	9.6	8
Security Natl. Bank, W. Va.	17.2	(1)	(1)	—
Security Pacific (Fund F), Calif.	26.0	(1)	(1)	—
Security Pacific (Fund V), Calif.	29.9	(1)	(1)	—
Shawmut Bank, Mass.	20.3	15.5	(1)	—
Shawmut Bank (Int.), Mass.	12.9	13.7	(1)	—
Society National, Ohio	24.1	17.4	10.7	3
Southeast Bank NA, Fla.	18.8	15.2	10.0	6
Sovran Bank, Va.	22.6	18.5	12.7	1
State Natl., Evanston, Ill.	15.0	14.8	9.5	8
Summit Bank, Ind.	13.4	12.5	8.6	10
Summit Trust Co., N.J.	17.1	14.3	9.9	7
Sun Bank, Fla.	20.6	14.7	9.2	9
Texas American Bank	18.2	15.3	10.1	6
Texas Commerce (Active)	22.7	14.3	12.3	1
Texas Commerce (Low Vol)	17.3	(1)	(1)	—
Third Natl., Nashville, Tenn.	14.8	13.6	9.5	8
Toledo Trust, Ohio	19.0	16.4	10.9	3
Travelers (Acct. D), Conn.	18.2	17.3	(1)	—
Travelers (Acct. P), Conn.	26.8	16.0	(1)	—
Trust Co. of Georgia	24.0	16.1	9.9	7
Trust Svcs of Amer., Calif.	26.6	18.0	11.2	2
Unibanctrust, Ill.	15.2	14.2	10.0	6
Union Central, Ohio	19.2	14.0	9.2	9
Union Labor Life, D.C.	14.5	(1)	(1)	—
Union Natl., Wichita, Kan.	19.4	14.4	(1)	—
Union Trust, Baltimore, Md.	15.0	(1)	(1)	—
United Carolina Bank, N.C.	10.1	12.4	(1)	—
United Missouri, K.C.	15.9	14.7	10.3	5
United of Denver	34.3	19.1	12.1	1
United Virginia Bank (No. 5821)	15.2	14.7	10.0	6
United Virginia Bank (Short Term)	12.3	14.1	(1)	—
US Natl. of Oregon	20.6	14.9	8.9	10
US Trust, N.Y.	21.4	14.2	10.8	3
Valley Fidelity, Tenn.	15.7	14.2	10.0	6
Valley Natl., Ariz.	19.7	15.6	9.7	8
Wheeling Dollar Bank, W. Va.	14.8	15.5	9.6	8
Wilmington Trust, Del.	16.0	11.7	8.3	10
Shearson Lehman G/C Index	**21.3**	**16.2**	**10.4**	**5**

(1) — Fund too new

Top quartile commingled equity funds

3-month returns

	%
New York Life Ins. (No. 1), N.Y.	25.3
Northern Central, Pa.	21.9
Puget Sound Natl., Wash.	21.1
First of America, Mich.	21.0
Guardian Ins. (No. 1), N.Y.	20.8
First Interstate of Denver	20.7
Norwest Bank, Minn.	20.3
Harris Trust, Ill.	20.3
Natl. City, Cleveland	20.2
John Hancock (No. 1L), Mass.	20.1
First Bank Milwaukee	20.0
Philadelphia Natl., Pa.	20.0
Employers Life of Wausau (No. 1)	19.9
First Pennsylvania Bank	19.6
Connecticut Bank & Trust	19.3
Bank of the West, Calif.	19.3
Valley Natl. (No. 1), Ariz.	19.3
Harris Trust, Ill.	19.2
Pacific Mutual, Calif.	19.1
Omaha Natl. Bank, Neb.	18.9
Seattle Trust, Wash.	18.8
First of Maryland	18.8
Texas American Bank	18.8
Chemical Bank (No. 2), N.Y.	18.6
Sun Bank, Fla.	18.6
Fidelity Bank, Pa.	18.6
First Tennessee, Memphis	18.6
Manufacturers Life, Ont.	18.6
First of Toledo, Ohio	18.3
Pittsburgh Natl., Pa.	18.3
New England Mutual	18.3
Liberty Natl., Okla.	18.3
First Interstate of Calif.	18.2
State Street Bank, Mass.	18.2
First of Neenah, Wis.	18.2
Manufacturers Hanover, N.Y.	18.2
First of America, Mich.	18.1
Citizens Fidelity (Fund E), Ky.	18.1
Republic Natl., Dallas	18.0
First of Oklahoma	18.0
Pittsburgh National, Pa.	17.9
Pioneer Bank, Ill.	17.8
John Hancock (No. 1K), Mass.	17.8
Bankers Life, Iowa	17.8
First Natl. of Tulsa	17.8
First of Neenah, Wis.	17.7
Summit Trust Co., N.J.	17.7
Riggs of Washington	17.7
IAA Trust Co. (Fund C), Ill.	17.7
Travelers, Conn.	17.6
Boston Safe Deposit	17.6
First Alabama, Mobile	17.6
Equitable Life (No. 4), N.Y.	17.5
Commerce Bank, K.C., Mo.	17.4
LaSalle National, Ill.	17.4
Prudential (5000), N.J.	17.4
Bankers Trust, N.Y.	17.3
Valley Fidelity, Tenn.	17.3
Lincoln Natl. Pens., Ind.	17.3
First of Shreveport, La.	17.2
Merchants Natl., Pa.	17.2
Standard & Poor's 500	**17.2**

1-year returns

	%
New York Life Ins. (No. 1)	48.4
Sun Bank, Fla.	47.8
Pioneer Bank, Ill.	47.4
MTrust, Fort Worth	41.8
First of Neenah, Wis.	41.1
Northern Central, Pa.	40.1
New Jersey National	40.0
Summit Trust Co., N.J.	39.4
Continental Bank, Pa.	38.5
First of Neenah, Wis.	37.8
First Kentucky Trust	37.7
Puget Sound Natl., Wash.	37.1
Valley Natl. (No. 1), Ariz.	37.1
American Fletcher, Ind.	37.1
Philadelphia National	37.0
New England Mutual	36.8
US Trust, N.Y.	36.8
Seattle Trust, Wash.	36.8
First Interstate of Denver	36.7
American Natl., Chicago	36.6
Connecticut Bank & Trust	36.4
John Hancock (No. 1L), Mass.	36.3
Society National, Ohio	36.2
Manufacturers Detroit	35.8
InterFirst Bank Dallas	35.8
Fidelity Bank, Pa.	35.5
Barnett Banks Trust Co., Fla.	35.4
First Jersey Natl., N.J.	35.2
Omaha Natl. Bank	35.2
Natl. City Cleveland	35.1
Merchants Natl. (No. 1), Ind.	34.9
Citizens Chillicothe (B), Mo.	34.8
Pittsburgh National	34.8
Old Kent, Mich.	34.7
Republic Natl., Dallas	34.6
State Natl., Evanston, Ill.	34.6
First Interstate of Ariz.	34.4
Harris Trust, Ill.	34.3
Mellon Bank, Pa.	34.2
First of Boston, Mass.	34.1
Metropolitan Life (No. 40), N.Y.	34.0
Bank of California	33.7
Bankers Life, Iowa	33.7
Riggs of Washington	33.6
Guardian Insurance (No. 1), N.Y.	33.6
Chemical Bank (No. 2), N.Y.	33.4
Home Life, N.Y.	33.4
Central Fidelity, Va.	33.4
First Fidelity Bank, N.J.	33.4
State Street Bank (Fund I), Mass.	33.2
Morgan Guaranty, N.Y.	33.1
US Natl. of Galveston	33.1
Bank of Tokyo, N.Y.	33.0
State Street Bank, Mass.	33.0
Liberty Natl., Okla.	32.9
AmeriTrust, Ohio	32.9
Summit Bank, Ind.	32.8
CNA Insurance (Acct. A), Ill.	32.8
First Security Natl., Ky.	32.8
Equitable Life (No. 4), N.Y.	32.7
First Wis. Natl., Madison	32.7
Confederation Life, Ont.	32.7
Frost Natl. (Fund A), Texas	32.5
Cullen Bank, Texas	32.5
First of America, Mich.	32.5
Standard & Poor's 500	**31.8**

3-year returns

	%
Sun Bank, Fla.	31.5
LaSalle National, Ill.	27.1
MTrust, Fort Worth	27.0
Bank of New England	26.5
Manufacturers Life, Ont.	26.1
First Interstate of Oregon	26.1
First Union Bank, N.C.	25.7
Guardian Insurance (No. 1), N.Y.	25.1
Provident Natl., Pa.	24.2
Prudential, N.J.	24.2
Republic Natl., Dallas	23.8
Manufacturers Detroit	23.6
First of America, Mich.	23.5
American Natl., Chicago	23.2
New Jersey National	23.0
Fidelity Mgmt. Trust, Mass.	22.8
Pioneer Bank, Ill.	22.8
US Natl. of Galveston	22.7
Mellon Bank, Pa.	22.5
John Hancock (No. 1L), Mass.	22.5
US Trust, N.Y.	22.5
First Wis. Natl., Madison	22.2
First of Omaha (Fund D)	22.1
Mercantile Safe, Md.	22.0
Natl. Bank of Commerce, Tenn.	21.9
Mercantile Trust, Mo.	21.8
Cullen Bank, Texas	21.6
First Fidelity Bank, N.J.	21.6
Bankers Life, Iowa	21.5
Marine Midland, N.Y.	21.3
Lake Shore Natl., Ill.	21.3
Frost Natl. (Fund A), Texas	21.2
AmeriTrust, Ohio	21.2
John Hancock (No. 1K), Mass.	21.1
First Jersey Natl., N.J.	21.1
Lincoln Natl., Ind.	20.8
Seattle Trust, Wash.	20.7
Old Kent, Mich.	20.6
Connecticut Mutual Life	20.6
State Natl., Evanston, Ill.	20.6
New York Life Ins. (No. 1), N.Y.	20.6
First of Warsaw, Ind.	20.4
Centerre Trust, Mo.	20.3
Mutual Benefit, N.J.	20.2
Continental Bank, Pa.	20.2
Bank of the West, Calif.	20.2
Bankers Trust, N.Y.	20.1
Mutual Serv. Life (Acct. B), Minn.	20.1
Confederation Life, Ont.	20.0
Citytrust (E1), Conn.	19.9
First Pennsylvania Bank	19.9
Landmark Union Tr., Fla.	19.9
American Natl., Chicago	19.9
Society Natl., Ohio	19.9
Colorado National Bank	19.8
Dauphin Deposit, Pa.	19.8
Standard & Poor's 500	**19.7**
Massachusetts Mutual	19.7
State Street Bank, Mass.	19.7
Sovran Bank, Va.	19.6
Oregon Bank	19.6
First of Neenah, Wis.	19.6
First Alabama, Mobile	19.6

5-year returns

	%
Sun Bank, Fla.	26.8
First Union Bank, N.C.	23.7
Manufacturers Life, Ont.	23.4
First Variable Life, Ark.	22.8
First Fidelity Bank, N.J.	22.2
Resource Bank & Trust, Minn.	22.0
Guardian Insurance (No. 1), N.Y.	21.2
AmSouth, Ala.	21.0
United of Denver, Colo.	21.0
Manufacturers Detroit	20.8
US Natl. of Galveston	20.6
American Natl., Chicago	20.4

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CrownLife
Beyond the expected.

STANDARD & POOR'S AA•A Claims Paying Ability

Top equity funds by size

1-year returns

Over $100 million

	%
Sun Bank, Fla.	47.8
Philadelphia National	37.0
American Natl., Chicago	36.6
John Hancock, Mass.	36.3
Manufacturers Detroit	35.8
Natl. City, Cleveland	35.1
Mellon Bank, Pa.	34.2
Metropolitan Life, N.Y.	34.0
Bankers Life, Iowa	33.7
Morgan Guaranty, N.Y.	33.1

$50 million to $100 million

	%
New York Life (No. 1)	48.4
Continental Bank, Pa.	38.5
First Interstate of Denver	36.7
InterFirst Bank, Dallas	35.8
Fidelity Bank, Pa.	35.5
First Jersey National	35.2
Old Kent, Mich.	34.7
First of Boston	34.1
First of America, Mich.	32.5
Marine Midland, N.Y.	32.2

$10 million to $50 million

	%
MTrust, Fort Worth	41.8
Northern Central, Pa.	40.1
New Jersey National	40.0
Summit Trust Co., N.J.	39.4
First of Neenah, Wis.	37.8
First Kentucky Trust	37.7
Valley Natl. (No. 1), Ariz.	37.1
New England Mutual	36.8
Seattle Trust, Wash.	36.8
Connecticut Bank & Trust	36.4

Under $10 million

	%
Pioneer Bank, Ill.	47.4
Lincoln National, Ind.	44.1
First of Neenah, Wis.	41.1
Puget Sound Natl., Wash.	37.1
American Fletcher, Ind.	37.1
Pittsburgh National	34.8
State Natl., Evanston, Ill.	34.6
Bank of California	33.7
Confederation Life, Ont.	32.7
First of Mobile, Ala.	31.7

10-year returns

Over $100 million

	%
First Wis. Natl., Madison	20.8
US Natl. of Oregon	19.2
Provident Natl., Pa.	18.3
Bankers Life, Iowa	18.2
Bessemer Trust, N.Y.	18.0
Sun Bank, Fla.	17.3
MTrust, Texas	17.1
Massachusetts Mutual	16.7
Manufacturers Detroit	16.7
Aetna Life & Cas., Conn.	16.6

$50 million to $100 million

	%
Manufacturers Life, Ont.	26.4
AmSouth, Ala.	18.1
First Interstate of Denver	17.8
First of America, Mich.	17.1
Continental Bank, Pa.	16.2
First Jersey Natl., N.J.	16.0
Chicago Title & Trust	15.4
First Tennessee, Memphis	14.5
Sentry Life (Acct. B), Wis.	13.9
Mercantile Safe, Md.	13.7

$10 million to $50 million

	%
Guardian Ins. (No. 1), N.Y.	22.2
US Natl. of Galveston	20.3
First Variable Life, Ark.	20.1
Citizens Chillicothe (B), Md.	20.0
First of Omaha (Fnd. D)	17.7
MTrust, Fort Worth	17.5
First of Oklahoma	17.4
Landmark Union Trust, Fla.	17.3
New England Mutual	17.1
Natl. Bank of Comm., Neb.	16.7

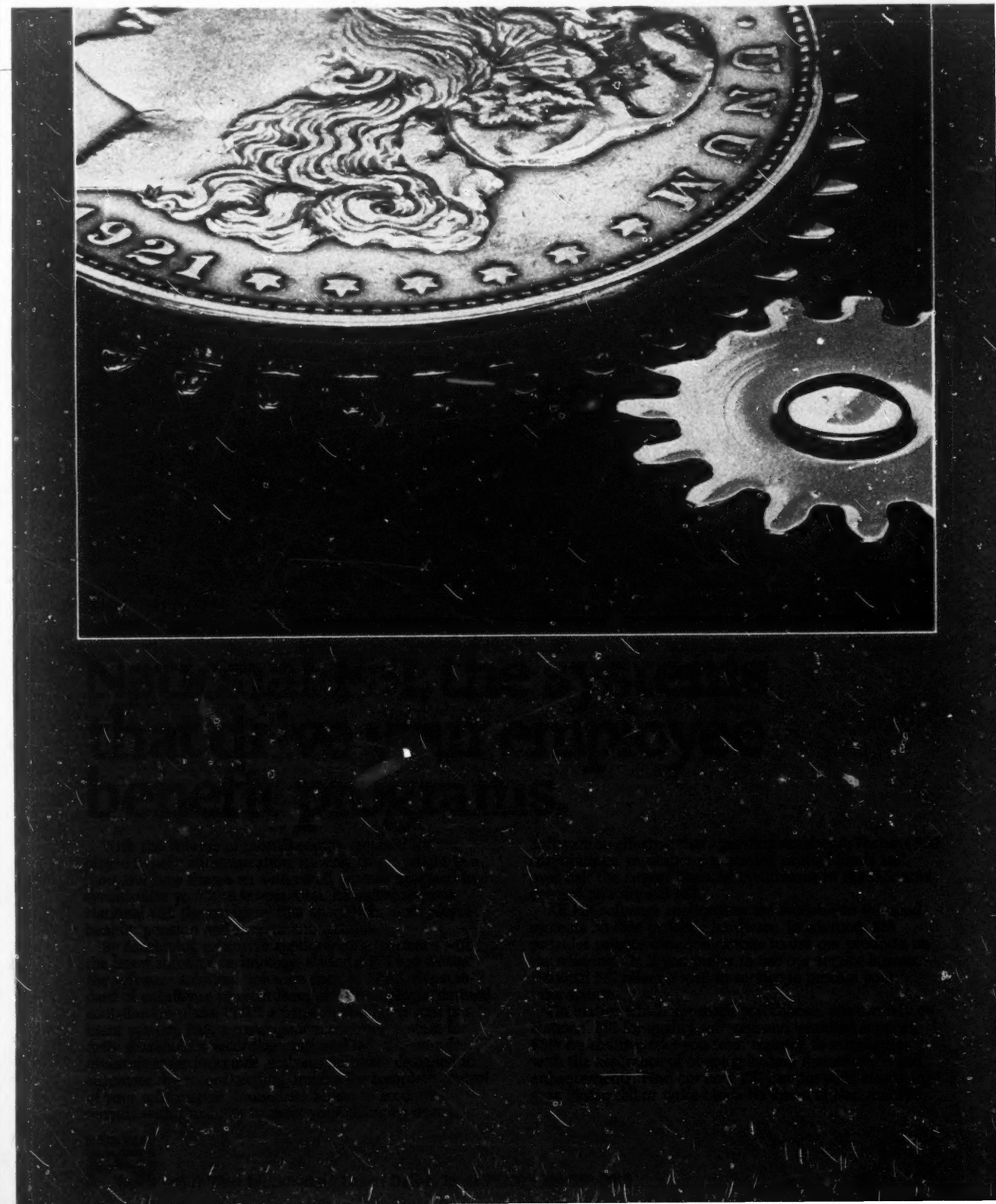
Under $10 million

	%
Confederation Life, Ont.	18.6
State Natl., Evanston, Ill.	16.9
Wheeling Dollar Bank	15.5
Pittsburgh National	15.0
Lake Shore Natl., Ill.	14.9
First of Neenah, Wis.	14.7
Unibanctrust, Ill.	14.3
First of Warsaw, Ind.	14.1
First of Kenosha (No. 4001)	13.7
Union Trust (D) Baltimore	13.5
First of Omaha (Fund D), Neb.	19.7
Prudential, N.J.	19.7
Mutual Benefit, N.J.	19.5
Lake Shore Natl., Ill.	19.5
First Wis. Natl., Madison	19.5
Pioneer Bank, Ill.	19.4
Provident Natl., Pa.	19.2
First Interstate of Oregon	19.1
Dauphin Deposit, Pa.	18.9
First Wisconsin Trust	18.9
Midlantic Natl., N.J.	18.9
Dominion Trust, Va.	18.8
First of Oklahoma	18.7
New England Mutual, Mass.	18.7
First of America, Mich.	18.6
Connecticut Mutual Life	18.6
Massachusetts Mutual	18.5
Confederation Life, Ont.	18.1
Landmark Union Trust, Fla.	18.0
Colorado National Bank	17.8
Barnett Banks Trust Co., Fla.	17.8
US Natl. of Oregon	17.7
First Security Natl. (Fund D), Ky.	17.7
Mid-State Bancorp, Pa.	17.6
Natl. Bank of Commerce, Tenn.	17.6
Seattle Trust, Wash.	17.6
Shawmut Bank, Mass.	17.4
Wheeling Dollar Bank, W. Va.	17.3
Bank of Tokyo, N.Y.	17.2
First Pennsylvania Bank	17.2
New Jersey National	17.1
Society Natl., Ohio	17.1
First Alabama Bank (No. 1)	17.0
Old Kent, Mich.	17 0
First of Warsaw, Ind.	16.9
Union Contral, Ohio	16.9
Centerre Trust, Mo.	16.8
United Carolina Bank, N.C.	16.7
AmeriTrust, Ohio	16.7
Citytrust (E1), Conn.	16.7
Gary Wheaton Bank, Ill.	16.7
Republic Natl., Dallas	16.5
Texas Commerce	16.4
First Citizens, N.C.	16.4
State Street Bank, Mass.	16.4
United Virginia Bank (No. 5822)	16.3
First Bank Milwaukee	16.3
State Natl., Evanston, Ill.	16.3
Minnesota Mutual (Acct. C),	16.3
Standard & Poor's 500	**14.7**

10-year returns

	%
Manufacturers Life, Ont.	26.4
Guardian Ins. (No. 1), N.Y.	22.2
First Wis. Natl., Madison	20.8
US Natl. of Galveston	20.3
First Variable Life, Ark.	20.1
Citizens Chillicothe (B), Mo.	20.0
US Natl. of Oregon	19.2
Confederation Life, Ont.	18.6
Provident Natl., Pa.	18.3
Bankers Life, Iowa	18.2
AmSouth, Ala.	18.1
Bessemer Trust, N.Y.	18.0
First Union Bank, N.C.	18.0
First Interstate of Denver	17.8
First of Omaha (Fund D)	17.7
MTrust, Fort Worth	17.5
First of Oklahoma	17.4
Landmark Union Tr., Fla.	17.3
Sun Bank, Fla.	17.3
First of America, Mich.	17.1
MTrust, Texas	17.1
New England Mutual	17.1
State Natl., Evanston, Ill.	16.9
Massachusetts Mutual	16.7
Manufacturers Detroit	16.7
Natl. Bank of Com., Neb.	16.7
Aetna Life & Cas., Conn.	16.6
Equitable Life (No. 4), N.Y.	16.6
Employers Life of Wausau, Wis.	16.3
United of Denver	16.3
Continental Bank, Pa.	16.2
Penn Mutual Life (Acct. A)	16
First Interstate of Oregon	16
First Jersey Natl., N.J.	16
Home Life, N.Y.	16
Colorado Natl. Bank	15
First Interstate of Wash.	15
Natl. City, Cleveland	15
IAA Trust (Fund C), Ill.	15
Wheeling Dollar Bank, W. Va.	15
Liberty Natl., Okla.	15
Chicago Title & Trust	15
Valley Fidelity, Tenn.	15
First Natl., Lincoln, Neb.	15
Citytrust (E1), Conn.	15
Texas Commerce	15
Bank of Tokyo, N.Y.	15
United Virginia Bank (No. 5822)	15
Pittsburgh National	15
Lake Shore Natl., Ill.	14
Philadelphia Natl., Pa.	14
Bank of Oklahoma, Tulsa	14
Standard & Poor's 500	**14**

An update on computer products available to fund managers appears March 3.



Top quartile commingled fixed-income funds

3-month returns

	%
Centerre Trust, Mo.	13.8
United of Denver, Colo.	13.5
Manufacturers Life, Ont.	13.3
Chase Manhattan, N.Y.	12.8
First Interstate of Denver	11.7
LaSalle National, Ill.	11.6
Commerce Bank, K.C. Mo.	11.0
Republic Natl., Dallas	10.9
Travelers (Acct. P), Conn.	10.6
Hawaiian Trust	10.6
Connecticut National Bank	10.5
Metropolitan Life (No. 41), N.Y.	10.3
Life of Virginia	10.1
CIGNA Corp., Conn.	9.9
First of Chicago	9.6
First Union Bank (Fund 1), N.C.	9.6
Trust Co. of Georgia	9.3
General American (Acct. 8), Mo.	9.3
First Jersey Natl., N.J.	9.2
Natl. Bank of Commerce, Neb.	9.0
MTrust, Texas	8.8
Trust Svcs of Amer., Calif.	8.8
Citizens & Southern, Ga.	8.8
Crocker Natl. (Fund R), Calif.	8.7
Maryland National	8.7
Chase Manhattan, N.Y.	8.7
Bank of New England, Mass.	8.7
Security Pacific, Calif.	8.7
Aetna Life & Cas. (No. 76), Conn.	8.6
Beverly Bank, Ill.	8.6
Connecticut National Bank	8.6
Chase Manhattan (A), N.Y.	8.5
Shawmut Bank, Mass.	8.5
Hibernia National, La.	8.5
Equitable Life (No. 5), N.Y.	8.4
Citicorp, N.Y.	8.4
Comerica Bank, Mich.	8.4
Exchange Natl. Bank, Ill.	8.4
Colorado National Bank	8.4
First of Omaha (Fund C), Neb.	8.4
National City Cleveland	8.3
Fidelity Bank, Pa.	8.3
Harris Trust, Ill.	8.2
First of Boston, Mass.	8.2
First Interstate of Nevada	8.2
American Security, D.C.	8.2
Continental Illinois	8.2
Bankers Trust (Fund A), N.Y.	8.2
Society National, Ohio	8.1
Massachusetts Mutual	8.1
First City Natl., Houston	8.1
Omaha National Bank, Neb.	8.1
IAA Trust Co. (Fund B), Ill.	8.1
Colonial American Natl., Va.	8.1
First Interstate of Calif.	8.1
Philadelphia Natl., Pa.	8.0
Bessemer Trust, N.Y.	8.0
First Interstate of Ariz.	8.0
First Interstate of Wis.	8.0
Associated Manitowoc, Wis.	7.9
Bankers Life, Iowa	7.9
Interfirst Bank Dallas	7.9
Lincoln Natl. Pens., Ind.	7.9
Prudential (Vca 7), N.J.	7.8
Chicago Title & Trust, Ill.	7.8
Chemical Bank (No. 1), N.Y.	7.8
Chemical Bank (No. 2), N.Y.	7.8
Key Trust Co., N.Y.	7.8
Manufacturers Detroit	7.8
Shearson Lehman G/C Index	**7.6**

1-year returns

	%
United of Denver	34.3
Centerre Trust, Mo.	32.5
First Interstate of Denver	30.2
Security Pacific (V), Calif.	29.9
Connecticut Natl. Bank	29.0
Manufacturers Life, Ont.	28.2
LaSalle National, Ill.	28.0
Life of Virginia	27.9
Hawaiian Trust	27.4
First Interstate of Nevada	27.0
Republic National Dallas	27.0
Travelers (Acct. P), Conn.	26.8
Trust Svcs of Amer., Calif.	26.6
Security Pacific, Calif.	26.0
Metropolitan Life (No. 41), N.Y.	25.8
General American (Acct. 8), Mo.	25.4
Commerce Bank, K.C. Mo.	25.3
AmSouth, Ala.	25.3
Citicorp, N.Y.	25.2
First Interstate of Ariz.	24.9
Aetna Life & Cas. (No. 76), Conn.	24.6
Chase Manhattan, N.Y.	24.6
Bankers Life, Iowa	24.5
Connecticut National Bank	24.4
First of Chicago	24.4
American Security, D.C.	24.3
Fidelity Bank, Pa.	24.1
Society National, Ohio	24.1
Comerica Bank, Mich.	24.1
Bessemer Trust, N.Y.	24.0
Natl. Bank of Commerce, Neb.	24.0
Trust Co. of Georgia	24.0
Manufacturers Detroit	24.0
Equitable Life (No. 5), N.Y.	23.9
Beverly Bank, Ill.	23.6
Bank of New England, Mass.	23.5
Chemical Bank (No. 1), N.Y.	23.5
Bankers Trust (Fund A), N.Y.	23.5
John Hancock, Mass.	23.5
Morgan Guaranty, N.Y.	23.5
First Interstate of Calif.	23.4
CIGNA Corp., Conn.	23.3
Natl. City Cleveland	23.3
First Jersey Natl., N.J.	23.3
Colonial Am. Natl., Va.	23.2
Bank of California	23.2
Maryland National	23.1
Crocker Natl. (Fund R), Calif.	23.1
IAA Trust Co. (Fund B), Ill.	23.1
First Kentucky Trust	23.1
Harris Trust, Ill.	22.9
Massachusetts Mutual	22.9
Texas Commerce	22.7
Continental Illinois	22.6
Sovran Bank, Va.	22.6
Chase Manhattan (A), N.Y.	22.6
Colorado Natl. Bank	22.6
Exchange Natl. Bank, Ill.	22.6
First of Omaha (Fund C), Neb.	22.6
First City Natl., Houston	22.5
Omaha National Bank, Neb.	22.4
Pacific Mutual, Calif.	22.4
Chemical Bank (No. 2), N.Y.	22.3
Northern Trust, Ill.	22.3
Liberty National, Ky.	22.3
Shearson Lehman G/C Index	**21.3**

3-year returns

	%
Security Pacific (V), Calif.	19.4
Life of Virginia	18.8
United of Denver	18.6
Trust Svcs of Amer., Calif.	17.8
IAA Trust Co. (Fund B), Ill.	17.4
First Interstate of Denver	17.3
First Variable Life, Ark.	17.1
Beverly Bank, Ill.	17.0
First Alabama, Mobile	17.0
First Interstate of Nevada	16.9
Connecticut National Bank	16.7
Central Fidelity, Va.	16.7
Centerre Trust, Mo.	16.6
Mutual of New York	16.6
CIGNA Corp., Conn.	16.3
First Interstate of Calif.	16.3
First Interstate of Ariz.	16.3
Mutual of New York	16.2
Lloyds Bank, Calif.	16.1
California First Bank	16.0
Security Pacific (F), Calif.	16.0
Sovran Bank, Va.	15.9
Key Trust Co., N.Y.	15.8
First of Chicago	15.7
Citicorp, N.Y.	15.7
Colorado National Bank	15.6
First Kentucky Trust	15.5
Crocker Natl. (Fund R), Calif.	15.5
Morgan Guaranty, N.Y.	15.5
Hamilton Bank, Pa.	15.4
CIGNA Corp., Conn.	15.3
Colonial Am. Natl., Va.	15.3
First Jersey Natl., N.J.	15.3
First of Omaha (Fund C), Neb.	15.2
Pacific Mutual, Calif.	15.2
John Hancock, Mass.	15.2
American Security, D.C.	15.1
First Wis. Natl., Madison	15.1
Manufacturers Detroit	15.1
Aetna Life & Cas. (No. 76), Conn.	15.1
General American (Acct. 9), Mo.	15.1
General American (Acct. 8), Mo.	15.0
Travelers (Acct. D), Conn.	14.9
Travelers (Acct. P), Conn.	14.9
Toledo Trust, Ohio	14.8
First of Neenah, Wis.	14.8
Exchange Natl. Bank, Ill.	14.7
AmSouth, Ala.	14.7
Oregon Bank	14.7
Society National, Ohio	14.7
Chemical Bank (No. 1), N.Y.	14.7
First of Maryland	14.6
Shearson Lehman G/C Index	**14.6**

5-year returns

	%
Life of Virginia	19.7
United of Denver	19.1
Sovran Bank, Va.	18.5
Centerre Trust, Mo.	18.5
First Kenturuky Trust	18.1
Trust Svcs of Amer., Calif.	18.0
First Interstate of Denver	18.0
Mutual of New York	17.9
Connecticut National Bank	17.8
CIGNA Corp., Conn.	17.7
Beverly Bank, Ill.	17.6
American Security, D.C.	17.6
First Variable Life, Ark.	17.5

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FIRST UNION

Top fixed funds by size

1-year returns

Over $100 million

	%
Centerre Trust, Mo.	32.5
LaSalle National, Ill.	28.0
Life of Virginia	27.9
Aetna Life & Cas., Conn.	24.6
Chase Manhattan, N.Y.	24.6
Bankers Life, Iowa	24.5
First of Chicago	24.4
American Security, D.C.	24.3
Equitable Life, N.Y.	23.9
John Hancock, Mass.	23.5

$50 million to $100 million

	%
First Interstate of Denver	30.2
Metropolitan Life, N.Y.	25.8
Comerica Bank, Mich.	24.1
Chemical Bank (No. 1), N.Y.	23.5
Bankers Trust, N.Y.	23.5
Massachusetts Mutual	22.9
Sovran Bank, Va.	22.6
Chemical Bank (No. 2), N.Y.	22.3
MTrust, Texas	22.2
Provident Natl., Pa.	22.0

$10 million to $50 million

	%
United of Denver	34.3
Security Pacific (V), Calif.	29.9
Hawaiian Trust	27.4
Trust Svcs of Amer., Calif.	26.6
Security Pacific (F), Calif.	26.0
General Amer. (No. 8), Mo.	25.4
Commerce Bank, K.C. Mo.	25.3
AmSouth, Ala.	25.3
Connecticut National	24.4
Fidelity Bank, Pa.	24.1

Under $10 million

	%
Connecticut National Bank	29.0
Manufacturers Life, Ont.	28.2
First Interstate of Nevada	27.0
Beverly Bank, Ill.	23.6
Colonial Am. Natl., Va.	23.2
Bank of California	23.2
Maryland National	23.1
IAA Trust Co., Ill.	23.1
American National, Minn.	21.8
First Natl., Lincoln, Neb.	21.7

10-year returns

Over $100 million

	%
Life of Virginia	13.1
Texas Commerce	12.3
Centerre Trust, Mo.	12.2
American Security, D.C.	11.9
Manufacturers Hanover	11.7
Boatmen's Natl., Mo.	11.3
John Hancock, Mass.	11.1
CIGNA Corp., Conn.	10.9
First of Chicago	10.6
NCNB Natl., N.C.	10.5

$50 million to $100 million

	%
Sovran Bank, Va.	12.7
Hibernia Natl., La.	12.1
First Interstate of Denver	11.0
Bankers Trust (Fnd. A), N.Y.	10.8
Bankers Trust (Fnd. B), N.Y.	10.7
American Natl., Chicago	10.5
Massachusetts Mutual	10.5
Midlantic Natl., N.J.	10.4
Irving Trust, N.Y.	10.3
Comerica Bank, Mich.	10.3

$10 million to $50 million

	%
Pacific Mutual, Calif.	12.6
First Jersey National	12.5
Seafirst Bank, Wash.	12.1
United of Denver	12.1
Fidelity Bank, Pa.	12.1
First Interstate of Calif.	12.0
First Fidelity, N.J.	11.5
Manufacturers Detroit	11.4
First Kentucky Trust	11.4
Commerce Union, Tenn.	11.4

Under $10 million

	%
Beverly Bank, Ill.	12.7
Central Fidelity, Va.	12.1
First of Neenah, Wis.	11.0
Key Trust Co., N.Y.	10.9
Connecticut National	10.9
Oregon Bank	10.9
MBank, Austin, Texas	10.9
Merchants Natl., Pa.	10.8
First of Maryland	10.8
Pacific Mutual, Calif.	17.3
Travelers (Acct. D), Conn.	17.3
Citicorp, N.Y.	17.3
First Interstate of Calif.	17.2
Bankers Trust (Fund A), N.Y.	17.2
Central Fidelity, Va.	17.2
First Interstate of Ariz.	17.1
Crocker Natl. (Fund R), Calif.	17.1
Seafirst Bank, Wash.	17.0
First Wis. Natl., Madison	17.0
Colonial Am. Natl., Va.	17.0
Marine Midland, N.Y.	16.9
John Hancock, Mass.	16.8
Morgan Guaranty, N.Y.	16.7
Cullen Bank, Texas	16.7
Associated Manitowoc, Wis.	16.7
AmSouth, Ala.	16.7
Allied Bank, Texas	16.7
First of Maryland	16.7
First Jersey Natl., N.J.	16.7
Key Trust Co., N.Y.	16.6
Mutual of New York	16.6
First Interstate of Nev.	16.6
Bank of California	16.6
First of Omaha (Fund C), Neb.	16.6
Fidelity Bank, Pa.	16.6
IAA Trust Co. (Fund B), Ill.	16.6
First of Chicago	16.6
First Alabama, Mobile	16.4
Commerce Union, Tenn.	16.4
Toledo Trust, Ohio	16.4
Hamilton Bank, Pa.	16.4
Colorado National Bank	16.3
CIGNA Corp., Conn.	16.3
Bank of New England, Mass.	16.3
Manufacturers Detroit	16.3
First Bank Milwaukee, Wis.	16.3
Shearson Lehman G/C Index	**16.2**

10-year returns

	%
Life of Virginia	13.1
Sovran Bank, Va.	12.7
Beverly Bank, Ill.	12.7
Pacific Mutual, Calif.	12.6
First Jersey Natl., N.J.	12.5
Texas Commerce	12.3
Centerre Trust, Mo.	12.2
Seafirst Bank, Wash.	12.1
United of Denver	12.1
Fidelity Bank, Pa.	12.1
Central Fidelity, Va.	12.1
Hibernia National, La.	12.1
First Interstate of Calif.	12.0
American Security, D.C.	11.9
Manufacturers Hanover, N.Y.	11.7
Mercantile Trust, Mo.	11.5
First Fidelity Bank, N.J.	11.5
Manufacturers Detroit	11.4
First Kentucky Trust	11.4
Commerce Union, Tenn.	11.4
Jefferson Trust, Ill.	11.4
First Interstate of Ariz.	11.4
First Wis. Natl., Madison	11.3
Boatmen's National, Mo.	11.3
Trust Svcs of Amer., Calif.	11.2
Cullen Bank, Texas	11.1
American Natl. Bank, Tenn.	11.1
Lloyds Bank (Fund C), Calif.	11.1
John Hancock, Mass.	11.1
Bank of New England, Mass.	11.1
First Interstate of Denver	11.0
Mellon Bank, Pa.	11.0
First of Neenah, Wis.	11.0
Allied Bank, Texas	11.0
Key Trust Co., N.Y.	10.9
Connecticut National Bank	10.9
Oregon Bank	10.9
Crocker Natl. (Fund R), Calif.	10.9
CIGNA Corp., Conn.	10.9
California First Bank	10.9
Toledo Trust, Ohio	10.9
MBank, Austin, Texas	10.9
Citicorp, N.Y.	10.9
Bankers Trust (Fund A), N.Y.	10.8
Indiana National Bank	10.8
Merchants Natl., Pa.	10.8
Riggs of Washington	10.8
First of Maryland	10.8
US Trust, N.Y.	10.8
Shearson Lehman G/C Index	**10.4**

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Cash Management

J.C. Penney targets retail lockboxing

By Richard J. Gillespie

NEW YORK — The credit card processing division of J.C. Penney Co. Inc. is campaigning aggressively to win a slice of the cash management market that most banks don't seem to like — retail lockboxing.

J.C. Penney Credit Services Inc., a subsidiary of the retailer, wants to process low-dollar lockbox payments and remittances for other corporations, according to Steven Kernkraut, president.

Retail lockboxing is a product some banks have discouraged because of high initial investment costs and low margins, said Mr. Kernkraut.

"I have a feeling other banks don't like to do it because it is a high-volume product which does not have a high profit potential, and to get it to have a high profit potential you have to make a significant investment in equipment," he said.

Recently two other non-bank lockbox systems ran into trouble.

Equitable Life Insurance Co. had been offering a wholesale lockbox system in conjunction with The Chase Manhattan Bank. That agreement has been terminated. And a lockbox product Sears, Roebuck & Co. was marketing in concert with Mellon Bank of Pittsburgh also was withdrawn.

Mr. Kernkraut believes J.C. Penney will succeed where others have failed.

Using state-of-the-art technology, the subsidiary plans to shave at least 25% off the current per-item cost of the retail lockboxing charges of banks. Retail lockboxing generally runs between 14 cents and 17 cents per item.

The new subsidiary is attracted to the area because J.C. Penney already has made a $15 million investment in video processing equipment, which it needs to process its 25 million-subscriber credit card base, said Mr. Kernkraut.

The subsidiary has installed its video image-processing equipment at its three processing sites: San Antonio, Texas; Orlando, Fla.; and Albuquerque, N.M.

In all, J.C. Penney's current monthly processing of 10 million monthly payments leaves plenty of room on the system for more business. Mr. Kernkraut said the total processing could be doubled under its existing configuration, and was limitless with additions to existing facilities.

Because of its technology, Mr. Kernkraut believes the credit services concern can not only slash the bank price on corporate lockboxing business, but also do third-party processing for banks and still turn a profit.

Recently, J.C. Penney Credit Services signed Commerce Union Bank of Tennessee, Nashville. Under the deal, the credit subsidiary is now processing that bank's retail lockbox business, including its credit card and mortgage payments processing. While the bank had no outside retail lockbox clients, Mr. Kernkraut said a local telephone answering service had shown interest.

If that company signs, all its checks and invoices will be mailed directly to the Commerce Union Bank's lockbox address in Nashville, from where they will be delivered by courier to Orlando for processing.

J.C. Penney Credit Services handles all its clearing through local banks, and its negotiated clearing schedules are based on J.C. Penney's massive volumes.

Asked whether the additional time taken to send items to and from Orlando might not create excessive delays in the payment cycle, Mr. Kernkraut said per item processing costs were mor significant.

"Typically you might expect t place your lockbox operation lo cally to get the float advantage," h said.

"But when you go through th economics of a retail lockbo where the average transaction siz is $30 or $40, it works out that th most critical element is the per item cost of processing.

"If you can drive your per-iten cost low enough it turns out tha you can even lose one whole day o float and still be better off bein where we are in the Southeast an Southwest."

In 1982, J.C. Penney consolidate its 11-point lockbox network int the three Sun Belt cities. He sai the benefits of the move include the avoidance of weather delay and the ability to attract a mor flexible work force.

J.C. Penney's initiation into th payments processing market fel out of a 1982 planning and develop ment paper that recommended th establishment of J.C. Penne Credit Services, which took plac in 1985.

In addition to organizing J.C Penney's 25 million-subscriber bas credit card operations, Mr Kernkraut said the subsidiary wa set up to market its experience an expertise in credit card marketin and payments processing to outsid concerns.

Recently the concern signed it

Continued on page 4

Three views of J.C. Penney Credit Services Inc.: The payment processing scanning operation, left; a video display terminal with stub and check image, center; and the supervisory terminals for the system.

Utility boosts investment power

By Fred Williams

ROCHESTER, Minn. — Most short-term portfolio managers would agree results hinge on speed, accuracy and flexibility.

They also would agree they can use considerable help in tracking floating-rate investment options in which a quarter of a point in price or a few hours can make a substantial difference.

Just less than two years ago, the financial services division of Southern Minnesota Municipal Power Agency began using a software package designed to track the investment of corporate cash and make short-term fixed-income investing and bond swaps simpler and more profitable.

The software also bridges the gap between the treasury and accounting departments, said John Lentz, financial services manager of the agency. He is responsible for the $350 million cash portfolio and keeps the agency on track in matching cash requirements with the payment schedule associated with its construction program.

The agency, a generation and power transmission firm that supplies electricity to 18 southern Minnesota cities, is a partner with Northern States Power Corp. in building a $750 million electric generating plant in Becker, Minn.; it has a 41% interest in the project.

Before the installation of the minicomputer-based package, actively managing the 10 portfolios and matching the cash flows to a project construction schedule was

"We needed equipment that was simple and could be integrated into the accounting system while still helping us make investment decisions," he said.

Southern Minnesota installed three components of financial services software designed by Technical Data Corp., Boston.

The fixed-income portfolio management software produced by Technical Data and its bond swap analyzer helped Mr. Lentz generate interest income of $27.8 million for the agency in 1985, he said.

Before installing the package, the company operated a system that could only produce a "tickler" file that kept the firm informed on cash flow, said Mr. Lentz.

"But we had to keep track of the portfolio and our only capability (then) was knowing the maturity dates and if periodic payments were involved they were also given, but it would show cash flow only. The amortization and accretion had to be done by hand," he said.

With the Technical Data package Mr. Lentz said each portfolio can be monitored more quickly. He noted the report-generating capability of the system can be designed or changed to the owner's specifications.

"Our accounting department can use the month-end reports generated by the system to feed the general ledger package on the mainframe," he said, adding that in the two years since it had been installed, the company had been audited three times without problems by Peat, Marwick, Mitchell & Co. Inc.

Actively managed liquidity port-

Continued on page 46

Payden & Rygel index of short maturities assets*
(for month ending January 31, 1986)

	January 1986	Quarter ending 12/31/85	Year to date	12 months ending 1/31/86	Yield level monthly change*
	Unannualized total returns				
90 Day					
U.S. Treasury Bill	0.6401	1.8910	0.6401	8.2802	–08
Domestic C.D.	0.6606	2.0447	0.6606	8.5236	+03
Euro $ C.D.	0.6550	2.0712	0.6550	8.6880	+09
180 Day					
U.S. Treasury Bill	0.6539	1.9997	0.6539	8.9516	–03
Domestic C.D.	0.6360	2.0389	0.6360	8.7792	+04
Euro $ C.D.	0.6660	2.1525	5.5060	8.9590	+16
1 Year					
U.S. Treasury Note	0.6713	2.3533	0.6716	10.1227	–02
2 Year					
U.S. Treasury Note	0.6603	3.6300	0.6603	11.2280	+01

*Figures are unannualized total returns. Year-to-date and 12 month figures based monthly. 90 and 180 Day Treasury Bill yield level changes on discount basis.

Cash notes

Comments sought

WASHINGTON — The thre main bank regulatory agencie have requested public comment o a proposal to measure bank capita adequacy on a risk-adjusted basis.

The Federal Reserve Board, th comptroller of the currency an the Federal Deposit Insuranc Corp., said the proposals were in tended to approach four policy ob jectives:

- to address off-balance sheet ex posures, which have expanded rap idly at many large institutions i the past several years;
- to temper disincentives in ex isting standards that discourag banks from holding low-risk, rel tively liquid assets;
- to move U.S. capital adequac policies more closely in line wit those of other major industria countries; and
- to provide more explicit guide lines to bankers and examiners fo relating capital to risk profiles.

In an apparent reversal of pos tion, an official statement said th proposals would not be designed "take explicit account of all th many types of risks to which bank ing organizations are exposed."

The proposed approach als would not substitute an assessmer of capital adequacy for an exam iner's judgment, according to th statement.

Under the plan, the agencie would assign a weighting to variou categories of assets. The sum of th weighted asset values would be th weighted risk asset total again

International

Good timing lets funds grab Continental bull by the horns

By Rose Darby

Timely decision making left many U.S. pension funds beneficiaries of the Continental bull markets last year.

A number of funds surveyed by *Pensions & Investment Age* increased their international commitments as of Sept. 30 in time to benefit from the bull markets and the decline in the dollar.

The size of the gains by many of these funds is shown by the Europe Australia Far East index, which advanced by 56.8% in dollar terms for 1985.

Those funds that moved most boldly in terms of percentage of assets committed to the international arena included: Sperry Corp., New York; Dart & Kraft Inc., Northbrook, Ill.; the State of Alaska Retirement Systems, Juneau; Eaton Corp., Cleveland; Honeywell Inc., Minneapolis; Oregon Public Employee's Retirement System, Salem; American Telephone & Telegraph Co., New York; Pan American World Airways Inc., New York; Delta Air Lines Inc., Atlanta; General Electric Co., Stamford, Conn; GTE Corp., Stamford, Conn.; and E.I. du Pont de Nemours & Co. Inc., Wilmington, Del.

Some funds went into international investments in late 1984 and during 1985 mostly because they got long-awaited board of trustee clearance to enter the arena for the first time.

Indeed, that is the main reason for Sperry's roughly 900% increase, to $50 million from $5 million.

It was mid-1985 when the $2.5 billion Sperry pension plan got permission to incorporate international investments into its overall asset allocation.

As a consequence, Sperry divided $50 million among Putnam International Advisors, Boston; Mellon-Pictet International Management Ltd., London; Mercator Asset Management Inc., Fort Lauderdale, Fla.; and Thorndike Doran Paine & Lewis, Boston.

Dart & Kraft increased its exposure to the area about 420%, to $78 million from $15 million.

That fund moved to enter the international investment field early in 1985, by giving Mellon-Pictet, Morgan Grenfell Investment Services Ltd., London, and the Vanguard Group Inc., Valley Forge, Pa., a total of $112 million.

A confluence of several events led to Dart & Kraft's well-timed move into international, said William H.S. Preece Jr., director-trust investments.

One was the weakening of the U.S. dollar. "That is because we are a multinational corporation which does about one-third of its business overseas," Mr. Preece said.

"It was also a portfolio decision, in that it was something we'd talked about for several years. And, finally when we got into it, lo and behold it was 1985."

As for international investments in 1986, Mr. Preece said, "it's clearly not the value it was a year ago, but I'd say it's about equally attractive to domestic investing at this point. We'd consider increasing our commitments, but we're one of those funds on a zero cash flow basis so it's not simply a decision of putting up new cash flow."

Officials at the roughly $2.4 billion State of Alaska Retirement Systems increased assets in international by 318% in 1985, to $117 million from $28 million.

This was the result of a forecast in which the most profitable area seemed to be international for both equities and fixed income, said James R. Wilson, state investment officer.

"Thus, we moved heavily into those areas," he said. Commitments to international equities were increased substantially, and about $35 million in international bonds were purchased to be managed in-house, he added.

Alaska's fund officials believe there are further gains to be enjoyed in foreign equities, said Mr. Wilson.

"But in the fourth quarter, we pulled our bond commitments," he said.

"This is not because we don't think there is money to be made there. It's just that not as much can be made as before, and due to currency risk, the potential rewards have to be greater to overcome that risk."

International equities comprise roughly 5% of the Alaska pension portfolio, and it is not expected that the fund will move beyond that point in the coming year, Mr. Wilson added.

For Eaton Corp.'s roughly $870 million pension and employee benefit plan, international investment increased by 267%, to $55 million from $15 million, during 1985, mostly because of the U.S. dollar, said Mart Tiismann, manager of pension fund investment.

"We saw the dollar weakening and decided to increase international," he said. "But, we did have the objective of diversifying into foreign markets even before the dollar weakened."

No policy decisions have been made at the fund to increase the 6% overseas equity exposure, he added.

The massive AT&T pension fund, which totals roughly $25 billion, increased its exposure to international 117%, to $551 million from $254 million, during the past year.

The fulfillment of a long-term asset allocation strategy was what fueled the timely increase.

"We had started our international program a couple of years ago," said David Feldman, corporate vice president. "We thought it was a good long-term thing to do and, having set the 5% target in 1982, we have just been getting there since.

"We continue to feel that international offers diversification and the performance differentials that

Continued on page 60

Growth of international assets 1985*
($ millions)

Pension fund	1984 invest.	1985 invest.	% increase
Sperry Corp.	$ 5	$ 50	900%
Dart & Kraft Inc.	15	78	420
State of Alaska	28	117	318
Eaton Corp.	15	55	267
Honeywell Inc.	30	109	263
State of Oregon	78	193	147
AT&T	254	551	117
Pan American World Airways	7	15	114
Delta Air Lines Inc.	47	90	91
General Electric Co.	243	460	89

* selected funds

Source: *Pensions & Investment Age*

International update

France is targeted

PARIS — The global investment phenomenon that has ignited so many of the world's markets is about to hit France, said Veerle Berbers, director of international research for Technimetrics, New York, in a speech to 150 French corporate and financial executives at a recent conference.

Ms. Berbers warned the executives to prepare for an explosion in international investments.

Foreign participation in the denationalization of major French companies alone could amount to 10% to 20% of an estimated $16.5 billion in new investments, she said.

"The global investment boom will without doubt come first and foremost from United States (pension) funds," she explained.

"Capital investments in foreign markets are at present still something new and exotic for Americans, but they will very soon be the norm."

International investment for U.S. pension funds approached $26 billion in 1985, Ms. Berbers said. That amount is likely to double by 1988 and to quadruple by 1990, she added.

French companies wishing to profit from this expansionist mood on the part of U.S. investors must make an effort to meet the information needs of financial analysts, whose decisive role is underestimated by the French, she said.

Ms. Berbers' speech was part of an investment forum at the Royal Monceau Hotel given by the Centre d'Observation et de Perspective Sociales, a non-profit financial research institute in Paris.

Wells' new product

SAN FRANCISCO — The stellar growth of international equity index funds during 1985 has index fund managers scuffling for undiscovered market niches and Wells Fargo Investment Advisors is vying for an edge with a new product.

Wells Fargo, in cooperation with Lombard Odier et Cie, Geneva, Switzerland, created six international bond indexes — the Lombard Odier Sovereign Bond Indexes — from which they can pattern index funds for pension fund clients, said Frederick L. Grauer, president.

These bond indexes are structured so a portfolio based on them has direct access to a particular foreign currency, he said. There are individual indexes for the pound sterling, the guilder, the yen, the French franc, the Swiss franc and the Australian dollar, he said.

These are sovereign indexes, which means every index

Continued on page 61

Spain, Finland, Singapore

Smaller markets eyed for '86

By Rose Darby

Some international money managers believe the world's smaller stock markets will offer the best investment opportunities in 1986, with Spain, Finland, Singapore and Malaysia topping the list.

In part, this is because the major European markets registered extraordinary gains last year and therefore might have less potential for gains this year.

The Austrian market, for example, advanced 112.8% in local currency terms during 1985 or 27.8% in U.S. dollar terms, according to Morgan Stanley Capital International Perspective. The Italian market saw a 97.9% rise in local currency terms, 15% in U.S. dollar terms, and the German bourse spiraled 80.9% in local currency terms, 27.9% in U.S. dollar terms.

Spain

Spain's markets will continue to be a value in 1986, according to Peter J. Morant, managing director of SBC Portfolio Management International Inc., New York.

Spain became a member of the European Economic Community Jan. 1. From an economic standpoint, the advantages of this change for the investor are long term, he said.

Short term, some of the changes taking place on the Iberian Peninsula do not portend well for Spaniards, but could spell opportunity

"The gradual elimination of import duties that will take place there over the next seven to 10 years will have a negative impact on the competitiveness of domestic industry and agriculture as well," he explained. "This will require a more flexible wage structure and improved quality and structural adaptations for industry."

Unemployment is likely to increase even further from already double-digit levels, he said.

The reason SBC officials are bullish on the market is that the Spanish government probably will try to ease some of the entry of imports into its marketplace by weakening the peseta, he explained.

"The peseta was among the weaker of European currencies last year," he said. "Because the Spanish government will try to weaken it even more, we will see quite a significant drop in interest rates there."

This is one of the few countries where there is still downward potential for interest rates, he said. "Our major risk will be that of currency," he added.

Economic growth in Spain slowed in 1985 to about 1.5% from the 2.2% levels of the year before, he said. "But we think it will accelerate to 2.5% in 1986 because of recent tax-relief measures and a pick up in the consumer sector and, most importantly, because of increased capital spending."

Spain's EEC membership will result in more foreign capital flowing and Japanese money, but now it will be European money and that should, in part, help keep the peseta from being overly weak," he added.

As a result of this outlook, Spanish chemical company stocks **Explosivos Rio Tinto** and **Fomento** seem particularly attractive right now because of their sensitivity to the economy, said Mr. Morant.

Utility stocks such as **Hydrola** will be beneficiaries of declining Spanish interest rates, he added.

Finland

Finland is one of the emerging markets of Continental Europe that could pay off for foreign investors in the coming year, according to Dennis Elliott, director of sales for Phillips & Drew International, New York.

"Finland has looked interesting for a long time," said Mr. Elliott. "As of Jan. 1, there have been changes in the Finnish tax structure both on a corporate and an individual basis that are anticipated to be of benefit.

"The market's volumes have increased. It has been a lot easier to deal in stocks in the last month or so.

"It was quite difficult to deal in millions of dollars previously, but the marketability of stocks has definitely improved."

Further, a cut in interest rates is expected in two months that could consolidate market gains, he said.

Foreign banks buy managers

By Rose Darby

Foreign investment banking organizations have acquired all or part of two U.S. money management firms.

Last month, British merchant bankers Hill Samuel Group PLC, London, announced the purchase of 100% of Investment Advisers Inc., Minneapolis, while French investment bankers Paluel-Marmont Group, Paris, became owners of 20% of Gray, Seifert & Co. Inc., New York.

Investment Advisers became a wholly owned subsidiary of Hill Samuel Group's investment management division for $27.1 million, said Tim Sanderson, manager of Hill Samuel Group.

As of Dec. 31, Investment Advisers had $3 billion in tax-exempt assets under management.

"We hope that the acquisition of Investment Advisers Inc. will improve strategy across the Hill Samuel Group," said Mr. Sanderson. "We believe it will act to increase our exposure to the U.S. market.

"We feel that the pension fund market in the U.S. is the pre-eminent market and we had a limited exposure there."

Hill Samuel's investment management division specializes in offering international investment services and the acquisition presents a large amount of domestically managed assets to which international services could be sold, said Mr. Sanderson.

Further, "There are services available from Investment Advisers that could be sold to U.K. pension funds as well," he added. "The two companies present good cross-selling possibilities."

Hill Samuel is also a joint owner of Travelers Hill Samuel International Ltd., Hartford, Conn., an international investment management firm that has about $195 million invested for U.S. tax-exempt clients overseas.

As to how the two fund management entities will function within the Hill Samuel Group, Mr. Sanderson said it is being discussed now with The Travelers Cos.

"There's no reason why the two companies can't co-exist, since they're not likely to be crossing each other very much," he said.

While there are no plans at Hill Samuel to buy more companies in the investment management field, longer-term acquisitions are not ruled out, said Mr. Sanderson.

Investment Advisers' staff and location will not change, he said, adding, "We're hopeful that their fast growth will be maintained and aided by us."

Hill Samuel has U.K. assets of $11 billion under management and advisory contracts for U.K. pension funds, unit trusts, property funds and individuals, said Mr. Sanderson.

The other acquisition involved Gray, Seifert & Co., which has about $400 million under management, mostly for high net-worth individuals, family groups and individual trustees, and Paluel-Marmont Group, which handles about $450 million in assets for French mutual funds, individuals and private corporations.

Early in the second half of 1985, IDS Financial Services, Minneapolis, sold back Gray, Seifert, which had been one of its money management subsidiaries, to its principal shareholders for an undisclosed amount.

The association with Paluel-Marmont "helps us by helping to broaden our outlook on foreign investment," said Edward W.F. Gray III, president of Gray, Seifert.

Mr. Gray said his firm had made international investments for its clients before and this association would enhance that ability.

"We had two ideas in going to the states," said Jean-Marie Paluel-Marmont, chairman of the board for Paluel-Marmont Finance Co.

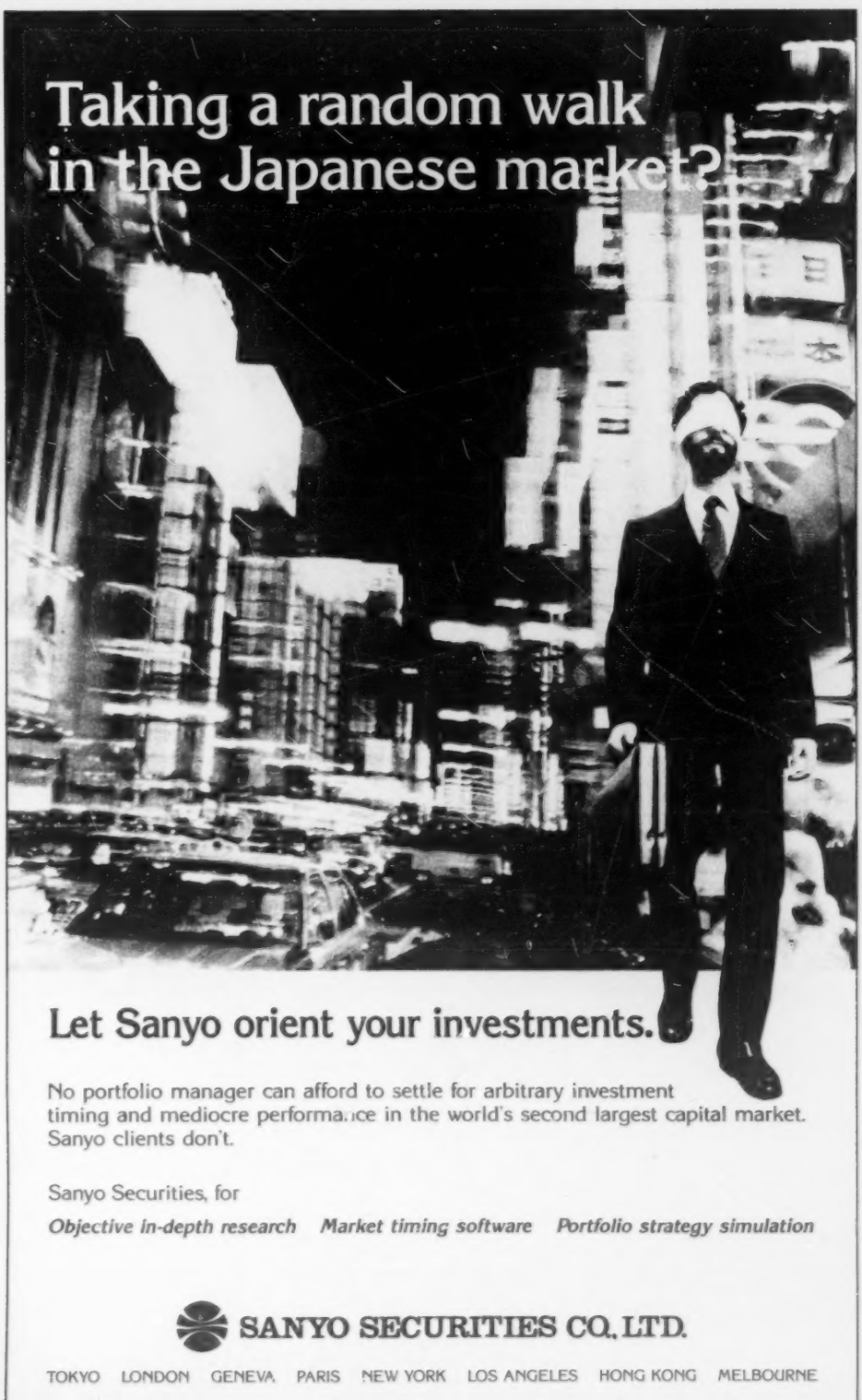
"First, we wanted to make an investment in the U.S. in an economic sector which we could understand and which we knew about," he said.

Also, the French firm wanted to benefit from its investment not only in returns, but from a product sales and marketing perspective, he said.

"What's happening in America is also happening in France a few years later," he explained. This move will put the Paluel-Marmont Group in a good position for future developments within the U.S. market in international investment, he added.

Further, "from a practical point of view, it's important for us to be able to talk to a money manager in the U.S. who has nothing to sell us," said Mr. Paluel-Marmont. "It's important for us to have a good contact with people we can trust and respect."

The Paluel-Marmont Group has been active in international investment both in Europe and the Far East, he said. ■



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Timing lets . . .

Continued from page 59

we're looking for. We have not tried to market time as we went in."

It is expected that within available cash resources, the AT&T fund will continue to work toward the 5% target, he said. "However, because of changes in the fund there is a lot less cash flow than there used to be."

The changes to the pension fund are both demographic and structural because of the fund's breakup in the wake of AT&T's divestiture, Mr. Feldman noted. Further, cash flow will be lessened because contributions have been reduced as a result of actuarial changes and performance, he said.

At the giant $15.8 billion GE pension fund, international investment increased 89%, to $460 million from $243 million.

"We added money early in the year, which enabled us to take advantage of the currency moves at the beginning of the year," said Art Bahr, manager of equities for General Electric Investment Corp., GE's wholly owned asset management subsidiary.

A portion of GE's international exposure is managed internally, said Mr. Bahr. "Including internal management and external, the total international investment return was slightly more than 50% for the year."

Should GE officials decide to allocate further assets to the area, they are likely to be managed internally, he said.

This is in part because John Reinsberg recently joined the GE investment team as manager of financial portfolios, he said. Mr. Reinsberg was an international countertrade and barter expert with the General Electric Trading Co., a wholly owned subsidiary, added Mr. Bahr.

While international investment comprises roughly 7% of GE's equity portfolio, "this number could be larger without disturbing us at all," he said.

For the about $7 billion GTE pension fund, assets invested overseas reached $667 million during 1985, said John B. Carroll, president of GTE Investment Management Corp. GTE was particularly well placed to enjoy the strong foreign markets in 1985 because it had increased its international commitment in the first half of 1984 in anticipation of a weakening dollar, he said.

"We've been involved in a big way in international for the past five years," Mr. Carroll said.

"One significant thing we did last year was to give all our managers the freedom to seek value where ever they find it in the world."

Initially, when GTE's nine overseas equity managers were hired, they were allowed to choose their benchmark — the EAFE index or Morgan Stanley Capital International World Index, which includes North American stocks, Mr. Carroll explained.

Two-thirds of the managers chose the world index, which is 53% weighted in U.S. stocks.

"We began to notice that all the managers that chose CIWI had a very heavy weighting in U.S. stocks," he said.

That could mean the managers were measuring themselves closely against the CIWI benchmark to avert risk.

But such large sectors devoted to U.S. stocks in international portfolios threatened duplication with the domestic portfolios, he explained.

Because GTE officials believe there is a low correlation between foreign markets and the U.S. market, and because on a currency-adjusted basis foreign markets have done better than the U.S. market, all managers were asked in 1985 to adopt the EAFE as their benchmark, said Mr. Carroll.

"We have a long-term commitment to the international markets — somewhere between 10% and 15% of overall equities," he said. "Currently, it's about 14% and we're comfortable with that at this point."

At the roughly $10 billion du Pont pension fund, there was a 53% increase in international exposure during 1985, to $460 million from $300 million, explained Stanley Palmer, international equity portfolio manager.

Part of the decision to increase international exposure was currency, said Mr. Palmer. "And, some of it was our thinking that overseas markets were attractive," he added. "The third reason being that we were bullish on equities."

The du Pont fund will maintain international investment at its current level, which is about 7% of

C2710-2

Corporations perform own analyses

By Barry B. Burr

Before choosing among several investment banks' competing anaiyses on calling a $400 million bond issue, Philadelphia Electric Co.'s corporate finance department turned to its personal computer to do its own number crunching.

"We weren't satisfied with their analyses until we could duplicate them on our personal computer," said Richard Wright, the utility's supervisor-financial division.

In the end, he said, Philadelphia Electric picked Goldman, Sachs & Co., largely because its analysis was the only one of the investment banks' with which the utility's corporate finance department could agree.

Before the finance department got its single IBM PC and Lotus 1-2-3 spreadsheet program, Mr. Wright said, "We would have relied more extensively on the presentation of the investment bankers. Or, we would have tried to do some calculations on mainframes." But using mainframes would have been slower, more cumbersome and the analysis less extensive, he added.

Such scenes are becoming commonplace as corporate finance departments purchase personal computers and analytical soft-

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COMPUTERS

for corporate financial management

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Pensions & Investment Age

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IRS enforcing plan amendment rules

Millions ride on missed deadline

By Joel Chernoff

WASHINGTON — Thousands of employers face losing millions of dollars of tax deductions for their pension contributions if they missed deadlines for filing plan amendments to comply with recent pension legislation.

Under an Internal Revenue Service announcement that has stunned the pension community, employers that did not submit to the IRS their plan amendments under the 1982 and 1984 tax laws and the Retirement Equity Act may lose part or all of their deductions for the 1984 and 1985 plan years.

For example, if a company whose plan year coincides with the calendar year submits its amendments in March, it may lose 20% of the tax deduction.

Benefit consultants said most of their clients, who tend to be sponsors of larger plans, have met the compliance deadlines, which generally fell on Nov. 1, 1985. But companies with small plans are far more likely to be victims of what is viewed by some as an unusually harsh and unprecedented penalty.

Owners and key employees of late-filing companies that maintain defined contribution plans will incur imputed income for a portion of the contributions for any plan years involved. That means affected employees will have to pay taxes on that contribution, even though no income actually was received.

However, that penalty is expected to affect few employees because of another tax code provision granting deductibility to non-qualified plans.

The announcement is "really a bombshell given what we have done in the past," said Fred Rumack, director of tax and legal services for Buck Consultants Inc., New York. The penalty for late filing "is in effect changing the rules of the game," he added.

"Under the guise of partial relief, the IRS seems to have imposed an unprecedented penalty on plan sponsors," said Saundra Dunne, assistant vice president for Alexander & Alexander Services Inc., Newburyport, Mass.

"This really is an outrageous way of administering the tax law," said Dennis Coleman, partner at Kwasha Lipton, Fort Lee, N.J. "People are going to be writing their congressmen."

However, sentiment about the notice was not unanimous.

"It seems to me to be a fairly reasonable approach on the part of the IRS," said Duane Mayer, chief actuary for Facciani & Co., Cleveland. "I guess I'm somewhat pleasantly surprised that (the IRS) didn't go further than they did."

An IRS official emphasized the notice provides partial relief for employers who

Continued on page 41

Photo by Arnie Adler

John H. Cannon, vice president and treasurer of F.W. Woolwor[illegible] purchased a range forward contract on deutsche [illegible] ecently, and is now a booster of the new foreign ex[illegible]ge tool. Story on page 27.

Dr Pepper sale may spark boom

Post-LBO activity surge seen

By Chuck Paustian

Coca-Cola Co.'s pending $470 million purchase of Dr Pepper Co. may be the first in a flurry of sales and public offerings of companies taken private through leveraged buy-outs.

Pension fund investors in Forstmann Little & Co.'s first subordinated debt and equity limited partnership — which purchased Dr Pepper in 1984 — stand to receive returns of more than 46% if the transaction meets regulatory approval.

Although the sale of a previously acquired company, or the offering of its stock in the public markets, is the natural conclusion to the leveraged buy-out process, many observers said the climate is right for a multitude of such activity.

"There is no doubt about it that the atmosphere out there, like any market timing (investment), now is the perfect time to gain your liquidity," said Kenneth A. Bodenstein, senior vice president and head of the financial consulting office of Duff & Phelps Inc., Los Angeles.

As portfolio companies are sold or go public, capital gains are divided among the limited partners.

In a leveraged buy-out, a target company is purchased with borrowed funds. The debt ultimately is paid down with funds generated by the acquired company.

The run-up in stock prices during the past few years has increased the value even of privately held companies, whose valuations are based in part on the value of compa-

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Plan assets could offset lost income

By Fred Williams

The sharp drop in oil prices since January is prompting Oklahoma officials to take another look at tapping the state's pension reserve fund to offset a projected record revenue shortfall of $467 million in the fiscal year beginning July 1.

A similar effort — proposed by Gov. George Nigh to meet a 1985 revenue crisis — was blunted by legislative leaders. (*Pensions & Investment Age*, Feb. 18, 1985).

So far, Oklahoma is the only oil state in which pension money is being considered as a way to supplement the state government's funding. But if oil prices continue to drop, public funds in other states — including Texas, Wyoming and Louisiana — may be affected because of revenue shortages and, possibly, fewer employees on which to base appropriations, some experts predict.

Oklahoma receives almost one-quarter of its revenue from a 7% severance tax on oil and gas production.

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TIAA-CREF officials fight to protect tax exemption

By Ed Christman

NEW YORK — Officials of TIAA-CREF are fighting to preserve the organization's tax-exempt status, which is threatened by the tax reform bill passed by the House of Representatives.

They are trying to persuade the Senate Finance Committee to retain the organization's tax-exempt status under its current structure in the Senate's tax reform bill.

At the heart of the matter is whether the Teachers Insurance and Annuity Association — College Retirement Equities Fund, which provides pensions to hundreds of thousands of college professors and teachers, is a commercial insurance company selling annuities to college and university pension plans or a nationwide multiemployer retirement system.

Last fall, the House Ways and Means Committee, treating TIAA-CREF as if it were an insurer, approved a tax reform plan containing provisions that would levy a tax on whatever was contributed to the reserve funds of TIAA, the approximately $23 billion fixed-income portion of the estimated $44 billion fund.

Also, it appeared to encourage TIAA-CREF to restructure so the annuities it provides to retirees are clearly related to its pension business, allowing the organization to avoid most of those taxes.

Approximately 98% of TIAA's assets back its pension business and 2% back its health and life insurance business.

Interviews with TIAA-CREF officials, interested observers and a staff member of the Ways and Means Committee turned up conflicting viewpoints on the implications of the tax plan.

TIAA-CREF officials claim the organization is a pension fund, and that the House plan unjustly taxes the retirement benefits of the college community because it doesn't attempt to levy a tax on corporate, public and union pension plans.

TIAA-CREF officials estimate that without restructuring, the tax proposal could reduce retirement benefits by as much as 12%.

But Roy Schotland, a professor of law at Georgetown University, Washington; Tom Woodruffe, executive director of the Commission of College Retirement, New York; and a staff member of the House committee, who did not want to be identified, all say TIAA-CREF officials are overreacting and generating a lot of unnecessary fear in the college community.

Mr. Schotland said "it's not clear that there would be any significant impact" upon retirees because TIAA-CREF's health and life insurance business is so small.

In addition to TIAA-CREF, the Blue Cross and Blue Shield Association, Chicago, and a few other organizations would lose their tax-exempt status under the plan.

Those organizations supposedly enjoy an unfair edge over their competition in the insurance field because of their tax-exempt status.

Early last month, the U.S. Senate Finance Committee held hearings on the proposal to eliminate the tax-exempt status of those organizations.

After the hearings, Sens. Bob Packwood, R-Ore., committee chairman; Daniel P. Moynihan, D-N.Y.; and John H. Chafee, R-R.I., reportedly said they were opposed to taxation of the TIAA-CREF pension system.

A spokeswoman for the Finance Committee said no date has been set for discussion of the bill.

Of the House bill, Francis Gunning, executive vice president and general counsel at TIAA-CREF, said organization officials never had a chance to talk with Ways and Means staff members and are not sure what they had in mind.

But it appears that starting with 1986, the bill would place a tax each year on whatever additions are made to the reserve funds backing up the assets used to meet the obligations of TIAA-CREF's life insurance and health insurance business, Mr. Gunning said.

Starting in 1988, unless TIAA-CREF restructures, the bill would tax whatever additions are made during the year to the reserve funds backing up the assets used to meet the obligations of its pension annuity business.

The House Ways and Means Committee reportedly estimated those moves would generate $80 million a year in revenue from TIAA-CREF, and $2 billion overall when Blue Cross and Blue Shield and others are included.

Mr. Gunning said there appear to be two reserve funds within TIAA that are taxable under the plan. One fund, the contingency reserve, has about $633 million and the other, the securities valuation reserve, about $163 million. Last year, TIAA contributed a total of $192.7 million to those funds that would be taxable.

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Manville slashes fixed-income use through hedging

By Trudy Ring

DENVER — Hedging has allowed Manville Corp. to overhaul its pension asset allocation, eliminating fixed income except in special cases, said James Beasley, vice president and treasurer.

"Essentially, we have become an equity-oriented program," Mr. Beasley said. This includes oil and gas, real estate and convertible bond investments, which he said are similar to equities because they involve an ownership interest.

Manville, which has more than $600 million in pension assets, changed its allocation at the beginning of the year. Previously, it had been between 50% and 55% in equities and 25% in fixed income, about 10% in cash and roughly 5% each in oil and gas, real estate and convertibles.

In the first quarter of 1984, Manville initiated a program of dynamic hedging, also called portfolio insurance, in which Leland O'Brien Rubinstein Associates Inc., Los Angeles, sells stock index futures contracts against the portfolio when the stock market is headed down. Manville also is using a smaller dynamic hedging program with J.P. Morgan Investment Management Inc., New York, which uses both stock index futures and put options on stock indexes.

These programs are designed to protect the entire pension fund from market losses. Because the portfolio is hedged in this manner, there seemed to be no reason for Manville to protect against stock market risk by having a portion of assets in less risky, but generally lower-return investments such as fixed income and cash, Mr. Beasley said.

Now, the fund maintains just enough cash to make benefit payments and put up margin requirements for the derivative instruments, he said. Also, it has gone long in stock index futures against its cash holdings, which are treated as if they were fully invested and participating in the stock market.

James Beasley

To implement its new asset allocation, the Manville fund gave about $200 million to eight new equity managers. The money came from existing managers, but no managers were dismissed, Mr. Beasley said. He declined to identify the new firms.

He did say the new managers have a variety of investment styles, such as large-capitalization stocks, small-cap stocks and international, but were screened to prevent the multiple-manager lineup from becoming a "giant index fund." Manville for the first time also allocated a small amount to an index fund, run by one of the new managers, he said.

The assets taken away from existing managers were in fixed income and some equity strategies. The equity management changes were designed to further diversify the fund's stock investments.

Also, allocations now are more evenly distributed among the managers, he said, but not all the new managers received exactly the same allocation.

Mr. Beasley said "one or two" of the managers have authority to use fixed income, but only if they believe they can make more money there than in equities.

Each of Manville's managers agreed to a benchmark based on its universe of stock selection, Mr. Beasley said. The benchmarks were established by the fund's master trustee, Harris Trust and

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Overseas investments draw allocations from 5

By Rose Darby

The Warner-Lambert Co. pension fund and The Common Fund have hired international managers in the past two months, and three other tax-exempt funds are believed to have done so.

The three reported to have added international or global managers are the pension fund of International Paper Co., New York; The Broyhill Foundation Inc., Lenoir, N.C.; and a multimanager commingled fund offered by The Frank Russell Trust Co., Tacoma, Wash.

The $82 million retirement fund of Warner-Lambert, Morris Plains, N.J., made a second commitment to international investment, hiring Putnam International Advisors, Boston, to run a $25 million to $30 million international equity portfolio.

The assets assigned to Putnam came from a reallocation of funds handled by other managers, although "no managers were terminated," said Marc Shapiro, manager-pension investments.

Putnam joins Rowe Price-Fleming International Inc., Baltimore, which runs about $42 million in international equities for the fund.

The Common Fund, the Fairfield, Conn.-based multimanager fund, recently hired ABD International Management Corp., New York, and BAIMCO International Ltd., London, to manage equities for its international commingled fund, said George Keane, president.

That fund totals $300 million, which includes investments for about 50 colleges and universities, he added.

The $1.28 billion International Paper pension fund reportedly hired State Street Bank & Trust Co., Boston, and a British fund manager, to run international equities.

Charles Henry, director-trust investments, would not comment.

State Street reportedly was hired to oversee an international equity index fund. State Street officials refused to confirm or deny the report.

The roughly $13 million Broyhill Foundation, a trust of Broyhill family assets, is said to have hired at least one international investment adviser.

Foundation officials said they could not comment over the telephone.

The Frank Russell Trust Co. reportedly hired Walter Scott International, Edinburgh, Scotland, to manage overseas equities for one of its international commingled funds. Frank Russell officials were unavailable for comment. ■

It's 'last call' for directory data

The completed questionnaires for *Pensions & Investment Age*'s Investment Adviser Profiles Issue of May 19 should have been returned by now.

Even though the deadline has passed and more than 400 managers have responded, *P&I Age* is issuing a last call for any trust bank, insurance company or investment management firm that manages tax-exempt assets and wants to be included in this important issue.

Late questionnaires will be accepted until March 17. Any firm needing a questionaire should call Carol Wiley, *P&I Age*'s directory coordinator, at (312) 649-5486.

The completed questionnaire must be received by March 17 for inclusion.

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COMPUTERS

for corporate financial management

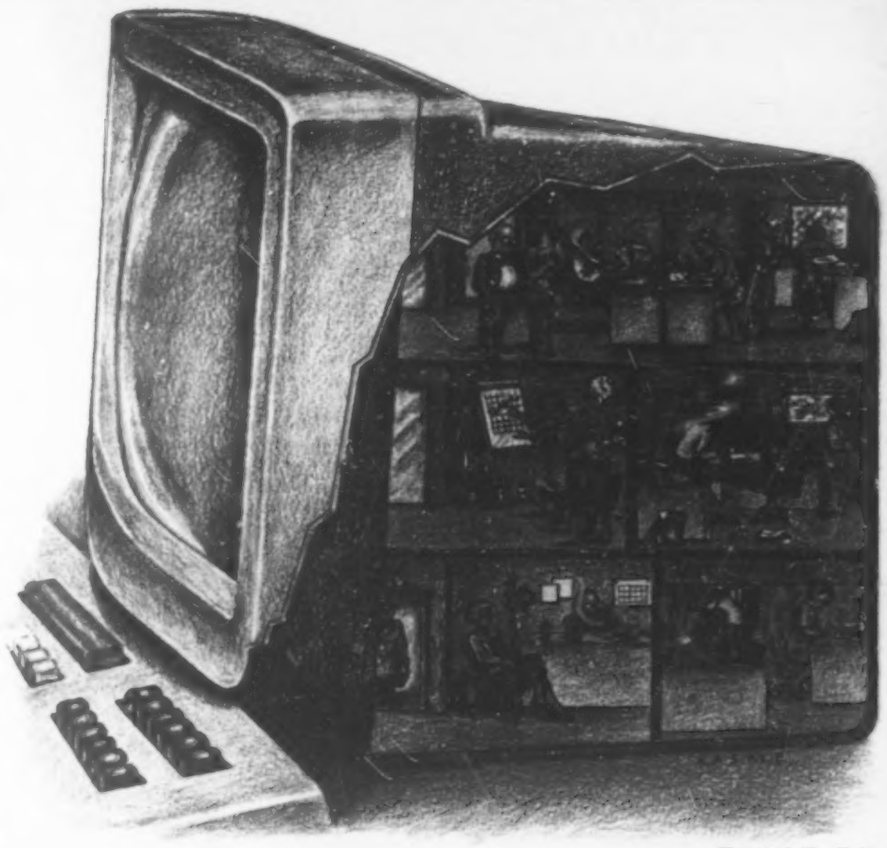

Illustration by Mary Kaskie

Pension programs cover the spectrum

Executives do everything from write their own to buy whole information systems

By Ed Christman

With the possible exception of Lotus 1-2-3, no one computer program meets the needs of pension funds using personal computers for internal analysis or tracking money managers.

Some large pension funds use mainframe computers for detailed analyses of their investments and their managers, apparently because of the limitations of the software available for personal computers.

A telephone survey of pension funds showed their use of computer technology ranges from creating their own programs and data bases to subscribing to services that supply a full complement of data bases and analysis software.

Xerox Corp., Stamford, Conn., with about $1.7 billion in employee benefit assets, all managed by outside investment advisers, uses programs written by Gerald Paolini, manager-trust performance analysis, on its in-house time-sharing mainframe system.

Those programs allow the fund to calculate and store the performance for each adviser on a monthly basis; do some what-if analyses; and compile a data base of potential managers.

Using data supplied by the fund's master trustee, State Street Bank & Trust Co., Boston, "we can do our performance reporting for each manager," Mr. Paolini said.

"It pays to do it yourself," he said. "Sometimes, it helps you to understand better what the numbers mean when you are compiling them yourself."

In addition to calculating performance, the fund maintains a performance data base for all of its managers. Using that data base, fund officers can compare performance among types of managers (e.g. equity, fixed income) and against appropriate indexes. Managers also can be compared by style or by assets under management.

Moreover, the staff can see what impact a certain move might have on the fund. "For example, we can see if we exclude some manager how it would affect the fund's return," Mr. Paolini said.

Xerox is also tracking potential investment managers by compiling its own data base, he reported. "We now have about 100 managers, with some degree of data on each."

On the other end of the spectrum, the Columbus-based Ohio School Employees' Retirement System recently entered into an agreement with Interactive Data Corp., Boston, for a broad range of computer services to assist in the management of the fund's nearly $2 billion in assets, which mostly are run internally, said R. Jack Cooper, chief investment officer.

The Interactive Data products are XPORT, a portfolio management, investment accounting and performance measurement system; Cashport, a system for managing short-term cash funds; BASIS, a fixed-income analysis system; and three data access and analysis tools, PC Screen, DataSheet and PC AnalystX.

In addition, the agreement allows the fund access to the Compustat data base, compiled by Standard & Poor's Corp., New York, which covers more than 6,000 companies, providing nearly 160 variables for each, he said.

"Previously, we used a data base which only covered 1,600 companies and was updated monthly," Mr. Cooper said. "Now, my data is 29 days newer, covering five times as many companies, and three times as many bits of information for each. Also, I have faster screening capabilities."

He said the fund also could use the data base to screen for several variables.

For example, "we may screen using 12 variables that we think are important in the current environment. With those variables, we can generate a list of 15 stocks and rank them. We can use other variables to screen for five buy names."

The IBM PC-XT is used by the fund's eight portfolio managers.

The agreement with Interactive Data will aid the fund executives in overseeing stocks, which comprise 29% of the fund's portfolio; bonds, 23%; mortgage-backed securities, 18%; and cash 14%.

But Mr. Cooper's next project is to find something that will help him oversee real estate holdings, which make up 15% of the portfolio. (The fund also has 1% in venture capital.)

Finding a program to fit all of the fund's real estate needs is going to be tough, he said. "The programs that are available are very

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Trial and error gets workstations running

By Richard J. Gillespie

NEW YORK — Although one recent survey found most corporate treasury officers who have workstations are very satisfied with the result, a spot check by *Pensions & Investment Age* found the initial steps were difficult, frustrating and hard work.

"It's not something you can plug in and expect to be up and running tomorrow. We are setting the precedent for the future, but treasurers have got to realize that they can't just walk in, press a button and get what they want," warned Margaret Graff, director of investor relations for the American Bankers Insurance Group, Miami.

Ms. Graff and several other corporate executives interviewed stressed the need to make sure the vendor will support the system and to make sure the company can deliver all it promises. They also issued warnings on being part of a pilot program.

"I don't recommend pilot projects to just anyone who needs a system," said Ms. Graff. "They have to have the time" to work on a pilot.

The treasurer of a large Texas corporation added, "If a bank wants you to be a test site, you had better find out if the bank is a test site."

Last year, American Bankers Insurance Group brought Interplex software into the company's cash management operation. But before then, Ms. Graff agreed for her office to serve as a pilot installation on a rival bank-offered, low-cost workstation.

As Ms. Graff recalls, the experience was all hard work and frustration. The bank supplying the software was always changing it, she said, and the modules failed to match up with the promises given by sales representatives.

There also was a serious flaw in the software that didn't become apparent until several months into the test, she said.

When the system was asked to print out a "Rolodex" of bank account information it had taken the staff hours to enter, the printer went down half the list and then stopped.

"It was an overrun," she said. "Half the banks just wouldn't print. The data was still there on the screen, but when I went to produce a report it would only print down to a certain spot."

The problem was not with the system's hardware, an IBM PC-AT with a 20-megabyte hard disc. The data base was just not large enough to handle the magnitude of data that the company needed, she said.

"So what was the point of having a system that was just going to do half of what was needed," Ms. Graff said.

"One thing I stress to people who call me for references on workstations is that if a workstation vendor's salesperson is not knowledgeable and doesn't understand a system, then there is going to be a problem."

As a result, the company switched to Interplex — a more expensive product, but one that meets its needs.

While the first package retailed for about $8,000, Ms. Graff said, Interplex's software cost more than three times as much — $27,000 to date with the total cost expected to be almost $30,000.

Yet the Interplex software is more sophisticated than the original bank-offered package in many respects, she said.

Interplex not only runs the account information lists in full and prints additional reports, but also offers a one-point system, which means an operator need only enter data into the system once, and the system will automatically feed it to all the other modules, she said.

The moral of the story, she said, is that if you are a big company with sophisticated needs, don't buy cheap software.

Cash management industry observers, however, said the experience was a case of mistaken iden-

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Trial and error . . .

Continued from page 11

tity. Much of the cheaper workstation technology was not designed to be used by large financial or other companies with complex bank arrangements, they said.

According to the recent survey by Treasury Strategies Inc., most treasury officials who do not now own workstations would want automatic dial-up capabilities and daily cash work sheet modules in their workstations. More than 75% wanted wire transfer capabilities and an additional 63% requested debt management modules. Fifty percent wanted investment management modules.

However, only 15% intended to spend more than $10,000.

But Ms. Graff does not regret getting involved in treasury workstation technology.

Not only did the new system enable American Bankers Insurance Group's treasury to operate more efficiently with staff of three, down from four people, but it also improved the treasury's operation's error rate, she said.

Best of all, it put some pizazz into the treasury work, providing her staff with motivation and involvement, she said.

Another treasury department that experienced problems its first time out was that of the Teachers Insurance and Annuity Association — College Retirement Equities Fund, New York.

Dave Grunbaum, associate treasurer, said after an initial disappointment with one bank vendor, the department has now installed a system that meets its criteria.

Before selecting the first vendor, the treasury group had discussed its approach in some detail, and had concluded the best approach would be to go with the company most able to survive and continue offering updates, enhancements and support, he said.

But only a few months after TIAA-CREF installed Citibank microcomputer software, CitiIntegrator, representatives of Citibank told him although it planned to continue supporting its software, no enhancements or additional developments could be provided.

"We wanted the system to grow with our needs, but the bank was not going to give us the guarantee that it would expand with our needs," said Mr. Grunbaum.

His case is noteworthy, according to Richard Poje, a principal with the cash management consulting firm, Treasury Strategies, Chicago, in that Citibank's workstation users indicated a very high degree of overall satisfaction with the CitiIntegrator workstation.

How satisfied are treasury workstation users?

Firm	Satisfaction scale: 1-5	% of users*
ADS Associates' Resource	4.29	4%
Wells Fargo's MicroExpress	4.15	8
MH Financial's Interplex	4.13	14
Citibank's CitiIntegrator	4.05	7
Chase Manhattan's InfoCash	3.76	13
Bank of America's MicroStar	3.72	19

* Estimate based on survey data of 501 non-financial, publicly held corporations.
Source: Treasury Strategies Inc., Chicago

"Most people have purchased plain-vanilla systems," said Mr. Poje.

"Mr. Grunbaum is more sophisticated . . . Most people got what they paid for and are happy (with CitiIntegrator)."

But for Mr. Grunbaum, it was exactly the kind of problem he had hoped to avoid. The treasury group is now up and running with the Chase Bank's treasury workstation system, Infocash. Assistant Treasurer Gary Chinery said he is satisfied with the result.

Another bad initial experience was had by the treasurer of the large corporation in Texas, who did not wish to be identified.

One of the company's banks had offered him the opportunity to use the then-new treasury workstation developed by ADP Network Resources on a pilot basis.

It soon became apparent that not only was the company a test site, but so was the bank.

"The (bank) thought ADP was going to support it and ADP thought the bank was going to support it so in the end we sent it back. We couldn't use it," he said.

In the end the Texas company's management information systems department put together a five-member staff that developed software in-house to meet the company's specific needs.

"In a couple of weeks they came back with the programs that we needed," the cash manager said. "We found that we did not need two sophisticated programs. To follow investments is not a terribly difficult module to develop. It does not have bells and whistles and is not in color, but anybody can buy dbase III and come up with something adequate."

Janet Mills, cash manager with Johnson & Johnson in New Brunswick, N.J., was one of the first to introduce a workstation into a treasury department when she bought Future Technologies MicroCash more than three years ago.

Ms. Mills, who says she is "more than satisfied" with the result, also believes her satisfaction relates directly to the system's being substantially customized from the outset.

"I think that certain basic things can be built into a treasury workstation that are viable for an off-the-shelf package," she said.

"Middle market companies will need certain specific bits of information, like bank balance reporting. You can use an off-the-shelf package for that. But where you get into larger corporations, and especially where our bookkeeping is not exactly what you call standard, I am not sure that standard packages would work."

Her views stem from knowing several cash managers disappointed with off-the-shelf packages, she said.

"They felt the company represented that they would do more. When they went to work on them, they didn't work," she said.

Another satisfied customer, this time of Bank of America's system, MicroStar, is Bob Moerchen, corporate cash manager with Outboard Marine Corp., Waukegan, Ill.

"We are still very satisfied with our system," said Mr. Moerchen.

The treasurer's office operates with a staff of three, he said, and the introduction of the workstation did not enable them to slim it down further, as was the case at American Bankers Insurance Group.

Also, the Outboard Marine treasury already had introduced a system to provide automatic general ledger updates some time ago, he said.

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The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. *PIPER details comparative performance data on special equity and international funds at more than 50 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

Technology, consumer stocks come on strong

By Chuck Paustian

Technology and consumer-oriented stocks performed well for the special equity commingled funds ranked in the top 10% for the quarter, one- and 10-year periods ended Dec. 31 in the Pensions & Investments' Performance Evaluation Report.

Although the performance of many funds was vastly improved from the previous quarter, the median fund in the universe failed to beat the Standard & Poor's 500 stock index in all but the 10-year period.

For calendar year 1985, the top performing fund was the regional bank fund managed by The First National Bank of Neenah (Wis.), with a return of 59.7%. For the same period, the S&P 500 returned 31.8% and the median manager in the universe, 27%.

The $25.3 million special opportunities equity fund managed by Lincoln National Pension Insurance Co., Fort Wayne, Ind., with a one-year return of 42.9%, made the biggest leap of the Top Five. The special opportunities fund finished fifth for year, after being ranked in the top 30% for the same period the previous quarter.

David A. Baker, president of MPT Associates Inc., New York, which manages the fund for Lincoln National, said diversification was primarily responsible for the portfolio's improved performance.

"Unlike a lot of comparable funds, the portfolio (of 25 to 40 stocks) has more issues than most and less dependence on a hot stock or two," said Mr. Baker.

The portfolio did include some technology stocks, but this was not part of any strategy to emphasize that sector. He said the fund does not have any particular sector emphasis, but rather picks stocks based on their individual merits.

"These are companies doing very well operationally but, for whatever reason, the market does not put a high (price-earnings ratio) on them," Mr. Baker said.

Stocks in the portfolio include: **American Family Corp.** (insurance); **Pearle Health Services Inc.** (optical); and **AST Research Inc.** (computer products).

The other top-performing funds for the one-year period are Citicorp Investment Management Inc., New York, emerging health care, with a return of 52.7%; Citicorp, special situation, 48%; and Fidelity Management Trust, 44.6%.

The performance of technology and consumer-oriented stocks played a more significant role in the performance rankings for the fourth quarter of 1985.

Although the median fund failed to outperform the market, those portfolios with a definite emphasis on the technology and consumer sectors leaped into the top 10% of the universe for the quarter after finishing lower in the rankings the previous quarter.

For the quarter ended Dec. 31, the S&P 500 returned 17.2%, while the median fund in the PIPER universe returned 15.4%.

The top performing fund for the quarter was the $43 million emerging growth fund managed by Irving Trust Co., New York, which returned 22.3%, up from its bottom 30% finish last quarter.

Neil T. Eigen, vice president at Irving Trust, said the fund's exposure to technology stocks, about 35% of the portfolio, has been both a curse and a blessing.

"(The fund) did not do well earlier in the year because of the overweighting of technology stocks, which have done well for us in the fourth quarter," he said.

Mr. Eigen said the fund invests in small-capitalization stocks, usually with capitalizations of $150 million or less.

He said holding the technology stocks were trying at times, but he decided to stand firm.

"The valuation of these small technology stocks was so out of line — they were hated for so long — that I felt they should be bought.

"I knew if I suffered through holding them they would perform well ... because it was just a matter of time before investors came back to these stocks," said Mr. Eigen.

Some of those stocks are: **Digital Communication Associates Inc., Emulex Corp., Wyse Technology** and **Software AG Systems Inc.**

Another fund that bounded into the top 10% was the $15 million growth fund run by First Pennsylvania Bank, Philadelphia, which was ranked in the bottom 10% the previous quarter.

F. Peter Brodie, vice president responsible for the investment of the special equity fund, said in addition to technology, the fund also had an emphasis on consumer staple stocks.

He said the fund actually re-emphasized the technology sector during the third and fourth quarters after moving out of those stocks earlier in the year.

Mr. Brodie said the fund stayed with the consumer staples and technology stocks during the third quarter, when other funds were moving into basic industries amid concerns of rising inflation.

"We did not take that route because we thought we were well positioned," said Mr. Brodie.

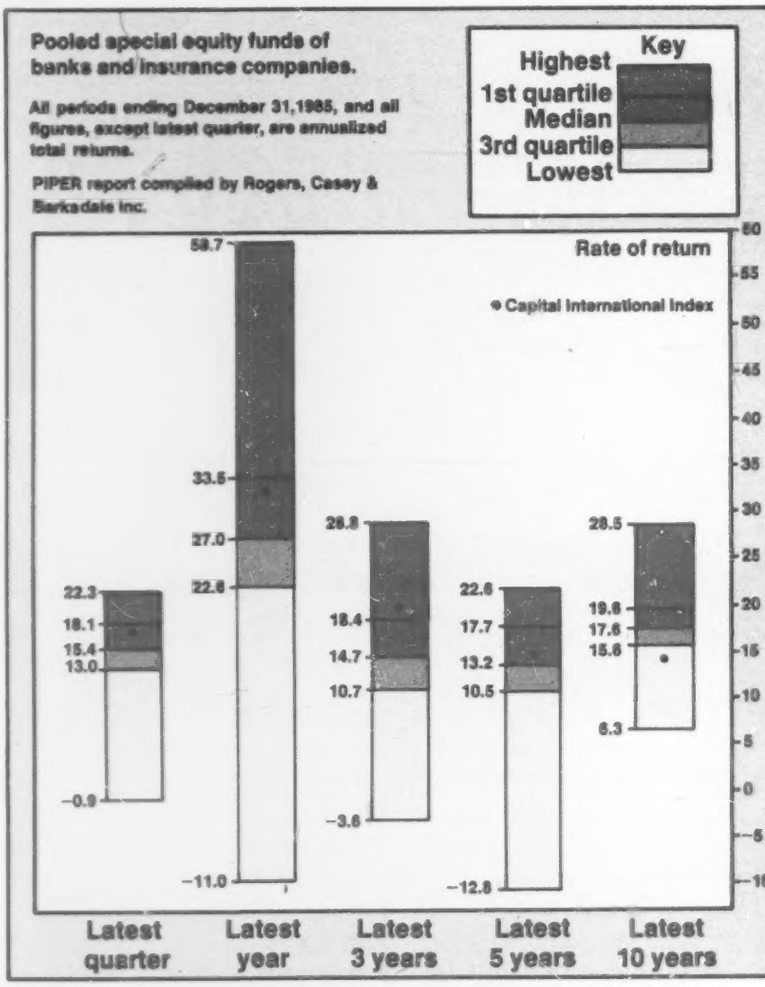
"So rather than switching to the basic industry stocks, we took the tack to stay in the consumer staples and also to re-emphasize the technology-related sector," he said.

In the consumer staples sector, some of the better performing stocks were **Maxicare Health Plans Inc., Prime Motor Inns Inc.** and **U.S. Health Care Systems Inc.**

The portfolio's stocks in the technology sector include **Ashton-Tate, Paychex Inc.** and **Monolithic Memories Inc.**

The remaining funds in the Top Five rankings for the quarter ended Dec. 31, and the previous quarter's ranking, are Merchants National Bank of Allentown (Pa.) with a return of 21.4%, bottom 10%; Fidelity Management Trust Co., Boston, 21.2%, to 30%; a n

Continued on page 18



Declining dollar aids returns for international funds

By Rose Darby

Commingled international funds scored impressive gains of as much as 60% in 1985, thanks, in part, to the steady decline of the U.S. dollar against other major currencies, Pensions & Investments' Performance Evaluation Report shows.

The fourth quarter contributed substantially to some funds' gains, especially those overweighted in the European continent.

Bank of America's $36 million international employee benefit equity fund was the top fund for the year ended Dec. 31, returning 61.4%.

The Europe, Australia and Far East index had a 56.7% total return for the year.

While international fixed-income funds also did well during the year, they were outperformed by the equity funds. The top performing bond fund returned 45.1% for the year, compared with the Shearson Lehman Government/Corporate bond index's 21.3%.

Fixed-income and equity funds, as well as global and international funds, are not separated in the international PIPER universe because of the small number of funds offered by banks and insurance companies. For that reason, Rogers, Casey & Barksdale Inc., the Stamford, Conn., firm that prepares PIPER, does not compute a median figure.

Bank of America's fund is managed by BAIMCO Ltd., the international subsidiary of BA Investment Management Corp.

While this fund was underweighted particularly in the export sectors of Japan's economy, there was some exposure to Japanese stocks that would benefit from consumer activity, such as construction stocks, said Keith Brown, chief investment officer.

"In Europe we thought growth would be somewhat anemic," said John Horseman, investment manager. "But we thought that the general improvement of these currencies against the dollar would allow substantial interest rate declines across the board.

"That brought about a very good opportunity in retailing issues where we felt high consumer spending would take place," especially in France, Belgium and the Netherlands.

Other sectors offering major gains because of the lower interest rates throughout the Continent were autos, insurance companies and utilities, Mr. Horseman said.

Citicorp's $180 million international equity fund was second for the year, returning 60%.

The fund is managed by Citicorp Investment Management, London, said Tony Watson, chief investment officer-international.

"We made gains in asset allocation by being heavily weighted in continental Europe as opposed to the United Kingdom, and heavily underweighted in Japan," he said. "In addition, we had very good performance in the German, French and Italian markets, and actually performed well in Japan, too."

Bankers Trust's $78 million international equity fund was third for the year, returning 58.2%, and Chase Manhattan Bank's $187 million global international equity fund was fourth, returning 57.5%.

Chase's fund has a non-U.S. investment mandate despite its name, said Ed Arbaugh, vice president international of Chase Investors Management, New York, which manages the fund.

In late 1984, the fund's portfolio managers studied how to improve performance after a lackluster year for international managers in general, he said.

He said they decided that stock selection was not contributing sufficiently to performance and that turnover was too high, given the higher-than-average transaction costs of foreign investment.

"So beginning in 1985, we decided to make heavy bets in weighting marketplaces and, within those markets, to have stocks which are similar — but not identical — to what was in EAFE," Mr. Arbaugh said. "Trading was not done unless an issue went against us or if it got to where we thought it should be."

Costs were reduced because turnover was almost zero in 1985, Mr. Arbaugh said.

For the quarter ended Dec. 3 international funds overweighte in continental Europe compared the EAFE had the best returns. Th Top 10 funds in the PIPER un verse all beat the index (which r turned 16.6%) for the quarter.

Centerre Trust Co.'s $82 millio Collective Fund W was the top pe former for the quarter, returnin 24.1%. That equity fund is jointl managed by Morgan Grenfell In vestment Services Ltd., Londo and Centerre, St. Louis, sai Thomas S. Darnall Jr., senior vi president of Centerre.

"We did well in the Europea markets, particularly in German the Netherlands and Switzerland Mr. Darnall said. "And compare

Continued on page

Index of charts

Special equity	19
International	20
Closed-end real estate	36
Open-end real estate	36

Technology stocks . . .

Continued from page 17

First Tennessee Bank, Memphis, 21.2%, bottom 10%.

For the three-year period ended Dec. 31, the top performing fund was Fidelity's aggressive equity fund, with a compound annual return of 28.8%, followed by Trust Company of the West, Los Angeles, 23.9%; Citicorp (special situation), 22.7%; Manufacturers Hanover Trust Co., New York, 22.7%; and First of Boston, 21.2%.

The S&P 500 returned 19.7% for the period, while the median fund had a return of 14.7%.

The $117 million uncommon value equity fund managed by Manufacturers Hanover moved up to the fourth spot for the three-year period ended Dec. 31, after being ranked 11th for the period the previous quarter.

John Spiezia, vice president at Manufacturers Hanover, said the portfolio, managed by Dorik Rozanski, vice president, does not emphasize any particular industry or market sector.

"He is looking for the big hit. He is looking for the triples and home runs relative to other value managers that look for the singles and doubles," said Mr. Spiezia.

Although Mr. Rozanski does not specifically try to identify takeover candidates, many of his stock selections acquisition targets, said Mr. Spiezia.

"Because of some of the fundamental characteristics he looks for, like strong balance sheets and large cash positions, they tend to be takeover candidates," he said.

For the five-year period, the top performing fund was Citicorp's real estate stock fund, with a compound annual return of 22.6%, followed by The First National Bank of Maryland, Baltimore, 20.8%; Chase Manhattan Bank, New York, (value equity) 19.9%; Chase Manhattan (intermediate capitalization equities), 19.7%; and First Trust Co. of St. Paul, 19.6%.

For the same period, the S&P 500 returned 14.7%, while the median fund in the universe returned 13.2%.

Chase Manhattan's $175 million intermediate capitalization equities fund moved into the top 10% for five years after being ranked in the top 40% for the period the previous quarter.

Neal Miller, vice president of Chase Investors Management Corp., New York, the investment management arm of Chase Manhattan Bank, said the growth fund uses a top-down approach in making its stock selections.

For example, when the nation entered its personal health kick a few years ago, the fund tried to locate companies that would benefit from the phenomenon.

"Our special twist here is that we have an overall structure to determine where the change is occurring, and then find specific companies that can take advantage of the change," said Mr. Miller.

Another national trend recognized by the fund was the move back to basics. As a result, the fund purchased stock in companies that manufactured blue jeans and sweatshirts, he said.

"From the general, you work toward the specific of an idea, then you get hold of the (specific company)," Mr. Miller said.

For the 10-year period ended Dec. 31, the top performing fund was the growth fund managed by MSecurities Corp., Dallas, with a compound annual return of 28.5%; followed by Equitable Bank, Baltimore, 27.1%; Northern Central Bank, Williamsport, Pa., 24.7%; Chase Manhattan (special equity), 23.4%; and First of Maryland, 23.3%.

For the period, the S&P 500 turned 14.4%, while the med fund in the universe surpassed index with a return of 17.6%.

Equitable's $2 million special uity fund is broken into three tions — 50% core, 25% new iss and 25% restructurings/tu arounds — said W. Patrick Fla gan, vice president and head of employee benefit investment gr at Equitable.

"It's an interesting mixture, not all one (investment) style. part of three or four differ styles," said Mr. Flanigan.

Some of the top perform stocks in the fund's portfolio **Baltimore Bancorp., King Wo Productions Inc., Audio/Vi Affiliates Inc.** and **Suburb Bancorp.**

PIPER is compiled by the c sulting firm of Rogers, Casey Barksdale Inc., Stamford, Conn.

Commingled special equity fund

3-month returns

Irving Trust (II), N.Y. .....
First Pennsylvania Bank .....
Merchants National, Pa. .....
Fidelity Mgmt. Trust, Mass. .....
First Tennessee Memphis .....
Lincoln National Pens, Ind. .....
Central Fidelity, Va. .....
Chase Manhattan, N.Y. .....
Texas Commerce .....
Trust Co. of the West .....
Maryland National (II) .....
Ameritrust, Ohio .....
Michigan Natl. of Grand Rapids .....
Manufacturers Hanover, N.Y. .....
First Alabama, Mobile .....
Citicorp, N.Y. .....
Manufacturers Detroit (Fund I) .....
Norwest Bank, Minn. .....
Chemical Bank (F), N.Y. .....
First of Neenah, Wis. .....
Security Pacific (Fund G), Calif. .....
Shawmut Bank, Mass. .....
CIGNA Corp., Conn. .....
Standard & Poor's 500 .....

1-year returns

First of Neenah (regional), Wis. .....
Citicorp (emerging health), N.Y. .....
Citicorp (spec. sit.), N.Y. .....
Fidelity Mgmt. Trust, Mass. .....
Lincoln Natl. Pens, Ind. .....
Equitable Bank, Md. .....
Metropolitan Life (No. 43), N.Y. .....
First of Boston (II), Mass. .....
Bankers Trust, N.Y. .....
Security Pacific (Fund G), Calif. .....
Associated Kellogg, Wis. .....
Chase Manhattan, N.Y. .....
Trust Co. of the West .....
LaSalle National, Ill. .....
Michigan Natl. of Grand Rapids .....
Connecticut National Bank .....
Northern Central, Pa. .....
First of Minneapolis (No. 20) .....
First Pennsylvania Bank .....
Mellon Bank, Pa. .....
Society National, Ohio .....
Texas Commerce .....
First of Neenah, Wis. .....
Standard & Poor's 500 .....

3-year returns

Fidelity Mgmt. Trust, Mass. .....
Trust Co. of the West .....
Citicorp (Spec. sit.), N.Y. .....
Manufacturers Hanover, N.Y. .....
First of Boston, Mass. .....
Republic National, Dallas .....
Provident National, Pa. .....
First Trust St. Paul .....
Citicorp (R.E. stock), N.Y. .....
National Bank of Detroit .....
LaSalle National, Ill. .....
Connecticut National Bank .....
Mutual of New York .....
Standard & Poor's 500 .....
Society National, Ohio .....
United Virginia Bank .....
Shawmut Bank, Mass. .....
Mellon Bank, Pa. .....
First of Boston (II), Mass. .....
Chase Manhattan, N.Y. .....
Merchants National (No. 2), Ind. .....
Associated Kellogg, Wis. .....

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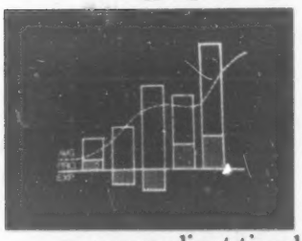

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5-year returns

	%
Citicorp (R.E. stock), N.Y.	22.6
First of Maryland	20.8
Chase Manhattan (Value), N.Y.	19.9
Chase Manhattan (Int. cap.), N.Y.	19.7
First Trust St. Paul	19.6
First of Boston, Mass.	19.5
Manufacturers Hanover, N.Y.	19.5
Citicorp (Spec. sit.), N.Y.	19.3
Provident National, Pa.	18.7
Norwest Bank, Minn.	18.4
Chase Manhattan (Spec.), N.Y.	18.4
Mutual of New York	18.0
Prudential, N.J.	17.9
Merchants Natl. (No. 2), Ind.	17.8
Connecticut National Bank	17.8
Bankers Trust, N.Y.	17.7
First Pennsylvania Bank	17.7
Standard & Poor's 500	**14.7**

10-year returns

	%
MTrust, Texas	28.5
Equitable Bank, Md.	27.1
Northern Central, Pa.	24.7
Chase Manhattan, N.Y.	23.4
First of Maryland	23.3
Bankers Trust, N.Y.	23.2
Connecticut Bank & Trust	20.5
Provident National, Pa.	20.1
Norwest Bank, Minn.	19.9
Morgan Guaranty, N.Y.	19.8
Standard & Poor's 500	**14.4**

Commingled international funds

3-month returns

	%
Aetna Montagu, Conn.	15.8
American National, Chicago	15.6
Bank of America (equity), Calif.	17.0
Bank of America (fixed), Calif.	14.4
Bankers Trust, N.Y.	18.6
Bessemer Trust, N.Y.	23.8
EAFE	**16.6**
Centerre Trust, Mo.	24.1
Chase Manhattan, N.Y.	19.8
CIGNA Corp., Conn.	18.3
Citicorp (equity), N.Y.	18.8
Citicorp (fixed), N.Y.	9.9
Crocker National, Calif.	16.1
Fidelity Mgmt. Trust, Mass.	20.7
First of Chicago (DLR fixed)	7.1
First of Chicago (equity)	20.6
First of Chicago (non-DIV fixed)	7.9
HT Investors, R.I.	19.7
IDS Trust, Minn.	21.5
Marine Midland, N.Y.	13.1
Mellon Bank, Pa.	12.4
Morgan Guaranty (bond), N.Y.	4.4
Morgan Guaranty (equity), N.Y.	18.5
Prudential (foreign bond), N.J.	8.2
Prudential (global bond), N.J.	10.9
Republic National, Dallas	23.5
Travelers Hill Samuel, Conn.	23.3
US Trust, N.Y.	14.4

1-year returns

	%
Aetna Montagu, Conn.	56.7
American National, Chicago	53.3
Bank of America (equity), Calif.	61.4
Bank of America (fixed), Calif.	45.1
Bankers Trust, N.Y.	58.2
Bessemer Trust, N.Y.	55.8
EAFE	**56.7**
Centerre Trust, Mo.	49.3
Chase Manhattan, N.Y.	57.5
CIGNA Corp., Conn.	55.2
Citicorp (fixed), N.Y.	60.0
Citicorp (equity), N.Y.	39.4
Crocker National, Calif.	32.4
Fidelity Mgmt. Trust, Mass.	50.8
First of Chicago (DLR fixed)	21.2
First of Chicago (equity)	56.1
First of Chicago (non DLR fixed)	37.6
HT Investors, R.I.	46.6
IDS Trust, Minn.	54.8
Marine Midland, N.Y.	51.2
Mellon Bank, Pa.	50.5
Morgan Guaranty (bond), N.Y.	30.3
Morgan Guaranty (equity), N.Y.	53.2
Prudential (foreign bond), N.J.	37.7
Prudential (global bond), N.J.	43.2
Republic Natl., Dallas	45.1
Travelers Hill Samuel, Conn.	48.7
US Trust, N.Y.	38.8

3-year returns

	%
American National, Chicago	24.6
Bank of America (equity), Calif.	22.3
Bank of America (fixed), Calif.	12.6
Bankers Trust, N.Y.	27.8
Bessemer Trust, N.Y.	20.9
EAFE	**28.2**
Centerre Trust, Mo.	21.8
Chase Manhattan, N.Y.	13.7
Citicorp (fixed), N.Y.	24.5
Citicorp (equity), N.Y.	10.3
Crocker National, Calif.	16.7
Fidelity Mgmt. Trust, Mass.	22.7
First of Chicago (DLR fixed)	17.1
First of Chicago (equity)	24.4
First of Chicago (non DLR fixed)	12.3
HT Investors, R.I.	15.8
IDS Trust, Minn.	29.1
Mellon Bank, Pa.	19.9
Morgan Guaranty (bond), N.Y.	10.4
Morgan Guaranty (equity), N.Y.	21.9
Prudential (foreign bond), N.J.	12.4
Prudential (global bond), N.J.	16.9
Travelers Hill Samuel, Conn.	23.5
US Trust, N.Y.	22.3

5-year returns

	%
American National, Chicago	14.1
Bankers Trust, N.Y.	16.1
Bessemer Trust, N.Y.	11.0
EAFE	**15.6**
Citicorp (fixed), N.Y.	13.2
Citicorp (equity), N.Y.	7.3
Crocker National, Calif.	5.1
First of Chicago (DLR fixed)	17.4
First of Chicago (equity)	14.1
First of Chicago (non DLV fixed)	8.9
Morgan Guaranty (bond), N.Y.	9.8
Morgan Guaranty (equity), N.Y.	12.8
US Trust, N.Y.	13.2

10-year returns

	%
EAFE	**16.3**
First of Chicago (equity)	14.1
Morgan Guaranty (equity)	15.4
US Trust, N.Y.	16.8

Declining dollar aids funds . . .

Continued from page 17

to other international managers, we held an above-average exposure to Japanese stocks."

Many Japanese high-technology stocks, which languished during most of 1985, rebounded sharply in the last quarter, Mr. Darnall said. "So, returns from the Japanese market were very positive, whereas they tended to hurt one during the early part of the year."

The fund's exposure to Japanese equities moved to a 44% weighting at the end of the quarter, from 39% at the beginning, he said.

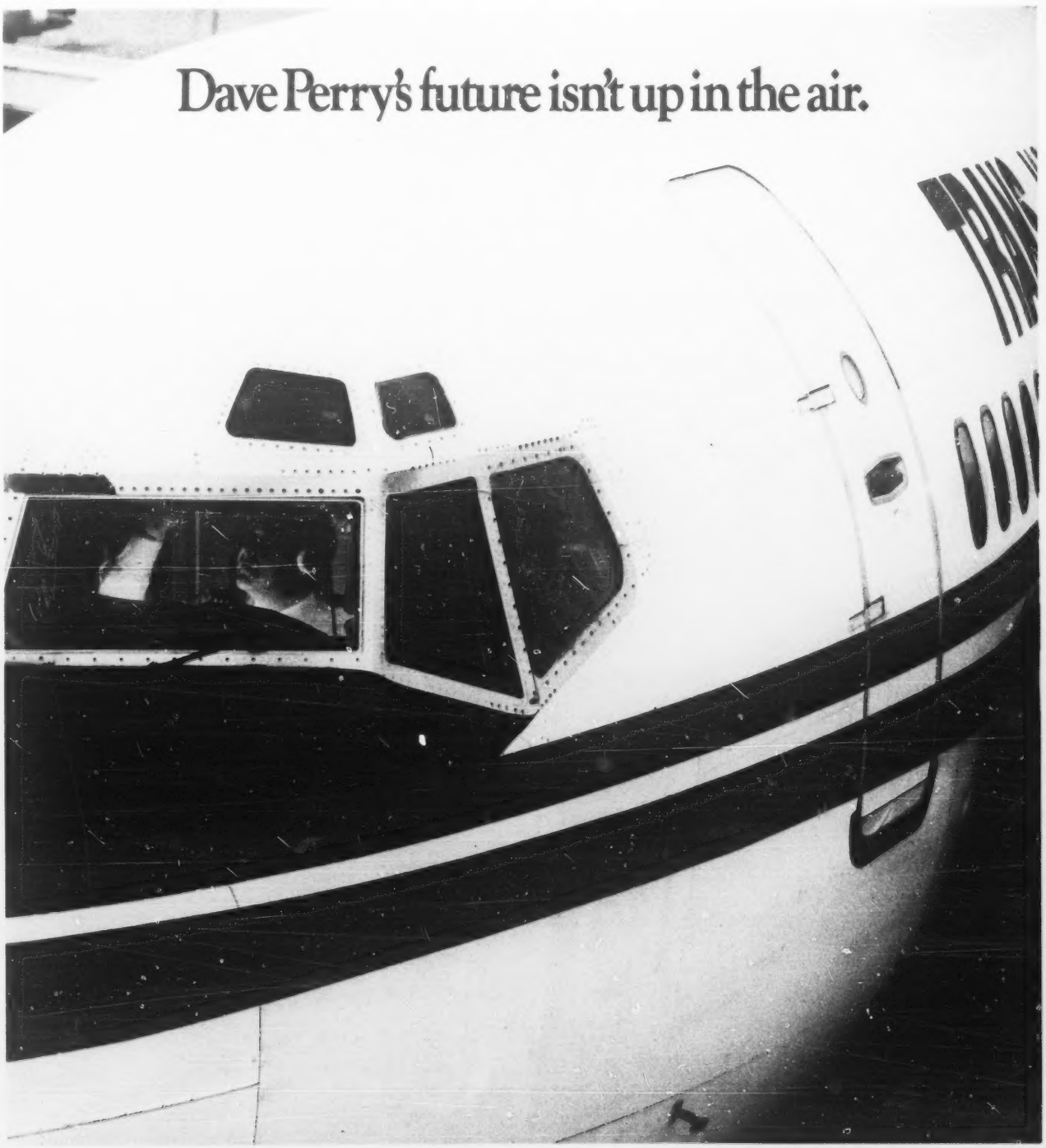
For the coming year, "we're still going to get the currency wind at our backs rather than in the face," Mr. Darnall said. "That will continue throughout this year and that's a positive, very clearly."

On a macroeconomic level, the recent decline in oil prices will be positive for foreign economies, he added.

Bessemer Trust Co.'s Fund E, was second for the quarter, returning 23.8%, followed by Republic-Bank Dallas' International Stock fund with 23.5%; Travelers Hill Samuel International Ltd.'s Separate Account W, 23.3%; and IDS Trust

Continued on page 20

Dave Perry's future isn't up in the air.



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Real Estate Open-end funds

Period ended Sept. 30

1-year returns

	%
Aetna Life & Cas. (PMSA), Conn.	12.4
Aetna Life & Cas. (RESA), Conn.	9.4
Bank of America, Calif.	3.7
Bank One Trust, Columbus	14.5
Bankers Life, Iowa	9.8
Canada Life Assurance	16.5
Chase Manhattan, N.Y.	15.6
Chemical Bank, N.Y.	15.1
CIGNA Corp., Conn.	14.5
Citicorp, N.Y.	18.4
Consumer Price Index	**3.2**
Crocker National, Calif.	7.9
Equitable Life, N.Y.	11.9
First of Boston, Mass.	11.3
First of Chicago	10.8
First of Minneapolis	12.0
Goldman, Sachs, N.Y.	10.6
Interfirst Bank, Dallas	11.7
John Hancock, Mass.	7.2
Lloyds Bank, Calif.	7.0
Massachusetts Mutual	11.3
Mercantile Trust, Mo.	8.6
Metropolitan Life, N.Y.	16.5
Metropolitan Life (Tower Fnd.)	9.4
Morgan Guaranty, N.Y.	13.9
Mutual Benefit Life, N.J.	20.0
NCNB National Bank, N.C.	16.0
New England Mutual	20.1
Phoenix Mutual, Conn.	19.0
Prudential (MORISA), N.J.	19.7
Prudential (PRIMOR), N.J.	16.0
Prudential (PRISA), N.J.	9.7
Republic Natl., Dallas	11.4
Seafirst Bank, Wash.	5.7
Sun Bank, Fla.	11.0
Third Natl., Nashville	8.3
Travelers, Conn.	7.5
United Virginia Bank	10.6
Wachovia Bank, N.C.	16.8
Wells Fargo Rlty. Adv., Calif.	9.1

3-year returns

	%
Aetna Life & Cas. (PSMA), Conn.	15.5
Aetna Life & Cas. (RESA), Conn.	11.5
Bank of America, Calif.	8.5
Bank One Trust, Columbus	11.1
Bankers Life, Iowa	11.2
Canada Life Assurance	12.9
Chase Manhattan, N.Y.	13.2
Chemical Bank, N.Y.	14.0
CIGNA Corp., Conn.	14.8
Citicorp, N.Y.	10.9
Consumer Price Index	**3.3**
Crocker Natl., Calif.	9.7
Equitable Life, N.Y.	13.5
First of Boston, Mass.	12.8
First of Chicago	12.6
First of Minneapolis	14.4
Interfirst Bank, Dallas	12.9
John Hancock, Mass.	10.1
Massachusetts Mutual	10.7
Mercantile Trust, Mo.	11.1
Metropolitan Life, N.Y.	16.5
Metropolitan Life (Tower Fnd.)	15.1
Morgan Guaranty, N.Y.	16.8
Mutual Benefit Life, N.J.	17.0
NCNB Natl. Bank, N.C.	16.8
New England Mutual	24.3
Phoenix Mutual, Conn.	17.6
Prudential (MORISA), N.J.	16.9
Prudential (PRIMOR), N.J.	16.1
Prudential (PRISA), N.J.	10.9
Republic Natl., Dallas	10.4
Seafirst Bank, Wash.	8.4
Sun Bank, Fla.	11.3
Third Natl., Nashville	9.2
Travelers, Conn.	8.2
United Virginia Bank	11.6
Wachovia Bank, N.C.	11.9
Wells Fargo Rlty. Adv., Calif.	8.8

5-year returns

	%
Aetna Life & Cas. (RESA), Conn.	12.6
Bank of America, Calif.	10.7
Bank One Trust, Columbus	14.6
Chemical Bank, N.Y.	15.5
Consumer Price Index	**5.1**
Crocker National, Calif.	10.8
Equitable Life, N.Y.	13.8
First of Boston, Mass.	13.3
First of Chicago	13.6
Interfirst Bank, Dallas	13.1
John Hancock, Mass.	11.1
Metropolitan Life, N.Y.	15.7
Morgan Guaranty, N.Y.	17.0
NCNB National Bank, N.C.	16.4
Prudential (PRISA), N.J.	11.7
Travelers, Conn.	11.1
Wachovia Bank, N.C.	15.2
Wells Fargo Rlty. Adv., Calif.	11.6

1st-quarter PIPER will run April 28.

10-year returns

	%
Bank of America, Calif.	10.6
Consumer Price Index	**7.0**
Equitable Life, N.Y.	12.9
First of Boston, Mass.	12.3
First of Chicago	12.1
Metropolitan Life, N.Y.	13.3
Morgan Guaranty, N.Y.	19.3
Prudential (PRISA), N.J.	14.7
Wachovia Bank, N.C.	14.9
Wells Fargo Rlty. Adv., Calif.	12.4

Real Estate Closed-end funds

Period ended Sept. 30

1-year returns

	%
Aetna Life & Cas., Conn.	17.9
Coldwell Banker (Fund II)	14.9
Coldwell Banker (Fund III)	8.3
Coldwell Banker (Fund IV)	10.9
Coldwell Banker (Fund V)	18.9
Coldwell Banker (Fund VI)	9.2
Coldwell Banker (Fund VII)	14.2
Consumer Price Index	**3.2**
JMB Institutional (Trust I)	18.0
JMB Institutional (Trust II)	16.5
John Hancock, Mass.	21.3
Landauer Advisors	18.9
LaSalle Advisors, Ill.	17.6
Metropolitan Life, N.Y.	9.3
Rosenberg (Mid-Am I)	9.0
Rosenberg (Mid-Am II	14.6
Rosenberg (REEF I)	6.9
Rosenberg (REEF II)	11.6
Rosenberg (REEF III)	10.9
Rosenberg (REEF IV)	9.2
Rosenberg (USA I)	10.7
Rosenberg (USA II)	7.4
Sarofim Trust Co.	21.4
State Street Bank (Fund I), Mass.	20.5
State Street Bank (Fund II)	10.9

3-year returns

	%
Coldwell Banker (Fund II)	15.9
Coldwell Banker (Fund III)	10.0
Coldwell Banker (Fund IV)	12.2
Coldwell Banker (Fund V)	18.2
Coldwell Banker (Fund VI)	10.4
Coldwell Banker (Fund VII)	11.4
Consumer Price Index	**3.3**
JMB Institutional (Trust I)	18.5
LaSalle Advisors, Ill.	16.7
Rosenberg (Mid-Am I)	9.8
Rosenberg (Mid-Am II)	13.4
Rosenberg (REEF I)	10.9
Rosenberg (REEF II)	12.4
Rosenberg (REEF III)	12.8
Rosenberg (REEF IV)	9.0
Rosenberg (USA I)	12.2
Rosenberg (USA II)	12.7
State Street Bank (Fund I), Mass.	16.3

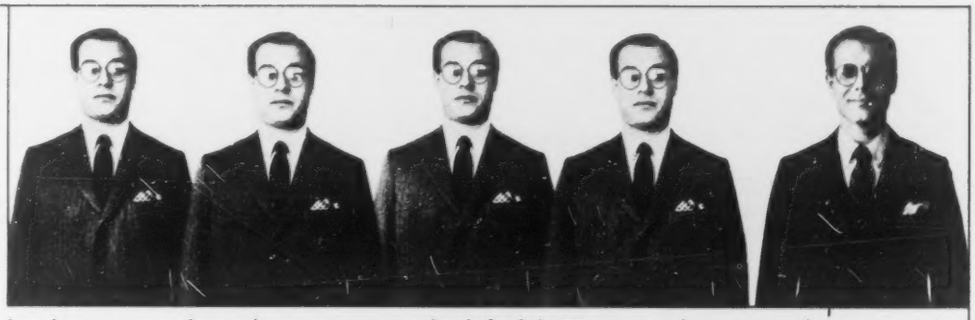
5-year returns

	%
Coldwell Banker (Fund II)	21.3
Coldwell Banker (Fund III)	11.9
Coldwell Banker (Fund IV)	15.0
Coldwell Banker (Fund V)	17.2
Consumer Price Index	**5.1**
Rosenberg (REEF I)	14.7
Rosenberg (REEF II)	14.1

10-year returns

	%
Coldwell Banker (Fund II)	21.2
Consumer Price Index	**7.0**

When you're the new investment management firm on the block, you'd better have a meaningful point of difference.



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Beacon Capital Management

New Castle . . .

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Inglesby said, but it left open the possibility of increasing the allocation in the future.

The pension system's current asset mix is 51% equities, 38% fixed income and 11% cash and short-term investments, Mr. Inglesby said. He expects the real estate commitments will be funded from the short-term portfolio and new contributions.

There are no plans to reduce the amounts handled by its current stock and bond managers.

New Castle County was assisted in its search for real estate managers by the Wayne, Pa., office of SEI Funds Evaluation Services. SEI had assisted the system in searches for equity and fixed-income managers, and provides it with investment performance measurement. ■

Money movers

Virginia Supplemental System

RICHMOND, Va. — The $4.5 billion Virginia Supplemental Retirement System has committed $20.8 million for a half interest in a $41.5 million participating mortgage secured by two Dallas properties with 435,000 square feet of retail and office space.

The loan, which the Virginia fund made in partnership with the general account of the Equitable Life Assurance Society of the United States, is Virginia's first investment under a $100 million participating mortgage program begun last fall (*Pensions & Investment Age*, Nov. 25).

The 10-year mortgage bears a coupon of 10% and entitles the lenders to share in 50% of the properties' income and appreciation.

New Hampshire Retirement

CONCORD, N.H.— The roughly $778 million New Hampshire Retirement System hired The Boston Co. to manage a $45 million equity account, said Harry M. Descoteau, executive secretary.

Assets for the new account came from the transfer of an equity portfolio from a former, unnamed investment manager, he said.

Vermont Retirement Systems

MONTPELIER, Vt. — The $450 million Vermont State Retirement Systems hired State Street Bank & Trust Co., Boston, as custodian, effective April 1, said Edwin C. Gallison, deputy state treasurer.

State Street Bank replaces Shawmut Bank of Boston, Mr. Gallison said. State State Bank also will provide performance measurement, which had been handled by SEI Funds Evaluation Services, Chicago.

Norfolk Retirement System

NORFOLK, Va. — The Norfolk Employees' Retirement System, which has about $230 million in assets, appointed United Virginia Bank as custodian and trustee, according to A.N. Gibson, executive secretary of the system.

Norfolk Employees' had used Sovran Bank as custodian, he said. It was dropped after the contract was put out to bid, as is required under a public procurement act.

Carnegie Institute

WASHINGTON — Carnegie Institute of Washington, an endowment fund with $175 million in assets, hired Bank of New York as custodian bank, according to John Lawrence, controller.

The Carnegie Institute uses Bank of New York as custodian for its $30 million retirement fund. The endowment fund had been with Morgan Guaranty Trust Co. The switch was made because Bank of New York provides online information services.

Charles A. Dana Foundation

NEW YORK — The Charles A. Dana Foundation, which has assets totaling $145 million, has hired the Bank of New York to serve as its master custodian, confirmed Herbert Vine, controller. The Bank of New York replaced Manufacturers Hanover Trust Co., New York.

International Teamsters

WASHINGTON — The International Brotherhood of Teamsters has hired Morley Capital Management Inc., Lake Oswego, Ore., to run a $35 million portfolio of guaranteed investment contracts, said Eugene Burroughs, director-investment department.

The assets, which are part of the Teamsters' $160 million in general operating funds, previously were invested in short-term instruments.

Earlham College endowment

RICHMOND, Ind. — The $84 million Earlham College endowment fund has hired Disciplined Investment Advisors, Evanston, Ill., to run a $15 million equity account, said Richard K. Smith, vice president-financial affairs.

Disciplined Investment replaces an undisclosed equity manager, who was terminated for poor performance, Mr. Smith said.

In addition, the fund selected Ariel Capital Management, Chicago, and Friess & Associates, Greenville, Del., to run a total of $1.8 million in small- to medium-capitalized stocks. Those assets were taken from cash.

Investment Management Control Systems, Boston, was the consultant.

San Joaquin Painters' Trust

SAN FRANCISCO — The about $6 million San Joaquin Painters' Pension Trust hired Wells Fargo Bank as sole manager for the fund.

Assets will be managed under Wells Fargo's three-way asset allocation system, which uses a mix of stocks, bonds, and money market instruments.

General Public Utilities Corp.

READING, Pa. — General Public Utilities Corp. hired Neuberger & Berman Pension Management, New York, to run an active fixed-income portfolio, said William M. Pammer, GPU's financial services director.

Frank Russell Trust Co., Tacoma, Wash., helped screen managers.

AM International Inc.

CHICAGO — AM International Inc. hired Harris Trust & Savings Bank, Chicago, as trustee of its profit-sharing plan, replacing State Street Bank & Trust Co., Boston, said Dessa Gannakopoulos, AM's corporate manager of employee benefits.

The plan was created after AM's reorganization.

Northwestern Memorial Hospital

CHICAGO — Northwestern Memorial Hospital, with about $200 million in tax-exempt assets, changed to specialty from balanced managers and consolidated the funds under a new custodian.

Hired were Trinity Investment Management Corp., Boston, for active equity management; American National Bank and Trust Co., Chicago, for a stock index fund; and Neuberger & Berman Pension Management, New York, for fixed income, a hospital spokesman said. The allocations to each were not available.

Terminated were balanced managers Stein, Roe & Farnham, Chicago; Scudder, Stevens & Clark Inc., Chicago; and Wall, Patterson, Hamilton & Allen, Atlanta.

Brown Brothers Harriman & Co. was retained as a balanced manager.

Northern Trust Co., Chicago, was hired as master trustee for the pension fund and custodian for the other assets — a foundation fund and a pooled investment fund.

First National Bank of Chicago had been master trustee of the pension fund. Harris Trust and Savings Bank, Chicago, had been custodian of the other assets, except those managed by Brown Brothers Harriman, which acted as custodian.

The Chicago office of Callan Associates Inc. assisted in the hirings.

GenRad Inc.

CONCORD, Mass. — The GenRad Inc. pension fund has switched a roughly $10 million equity account to Lazard Freres Asset Management, New York, from Rollert & Sullivan Inc., Boston, according to C.J. LaHanas, vice president.

The fund, with an estimated $25 million in assets, made the change because of type of service needed, performance and changeover in Rollert & Sullivan's management, he said.

D.C. Area Carpenters Union

The Washington D.C. Area Carpenters Union pension fund has hired United Virginia Bank, Richmond, Va., as custodian for its fund. Wayne LaRochelle, marketer of the bank's custodial services, confirmed the hiring.

Jacksonville Plumbers

JACKSONVILLE, Fla. — The Jacksonville Plumbers & Pipefitters, with $13.5 million in pension assets, hired Investment Advisers Inc., Minneapolis, and Lowe, Brockenbough, Tierney & Tattersall Inc., Richmond, Va. The fund's assets will be split evenly between the two managers, said David Mast, vice president of Administrative Services Inc.

The assets previously were managed by Professional Capital Management Inc., Jacksonville.

Corporate finance . . .

Continued from page 12

Condon. But once familiar with the personal computer, he said, you save a lot of time, ensure better accuracy and do repetitive calculations quickly.

Few of the firms surveyed tied in their personal computers with their mainframe computers, although they have the capability.

"We haven't had much need for it," Mr. van Patten said. "The capability is there."

At Piedmont Aviation Inc., Winston-Salem, N.C., A.J. Carter, assistant treasurer said of its two IBM PC-XTs bought last year, "It greatly improves productivity, especially for things that are repetitive."

Piedmont, which leases many of its aircraft, has put its lease agreements on the personal computer to display conditions and terms so the company knows the dates when they have to be fulfilled, he said.

Before, Piedmont had to flip through hundreds of pages regularly to check lease requirements.

In addition, it projects cash flow requirements, forecasting when to finance or doing side-by-side comparisons of leasing vs. buying aircraft.

The personal computer "helped keep us from increasing staff," Mr. Carter added.

"By definition, it means we can do some work with fewer people," Kaiser's Mr. van Patten said.

But no one in the corporate finance departments of the companies surveyed lost a job because of the introduction of personal computers.

With the personal computers, many analysts also are typing their own memorandums and letters, rather than sending them to secretaries. "We no longer are writing memos and having them typed up," said Mr. van Pattan.

At Maytag Co., Newton, Iowa, John P. Tolson, director of financial reporting, said, "We have not reduced staff at this point due to the personal computer. But I can see at some time that may be a possibility. The p.c. has probably enabled us to work with less overtime.

"We do a lot of consolidation work on the p.c.," Mr. Tolson said, combining financial data of four divisions using Symphony software. Also, the firm used it to forecast operating budgets and long-term financing modeling.

Writing with word-processing software has been an unexpected benefit to financial analysts, said many of the executives. Like a number of others, Mr. van Patten said, "I find I write better by sitting down on the p.c. than by scribbling down on paper."

But Maytag's Mr. Tolson said, "We don't really use the word-processing capabilities. It's probably the least utilized function."

All the executives described the personal computer as a tool, not a decision-maker. They said it weaves no magic; essentially it does the same thing the financial executives were doing before by hand or on their mainframes, except faster, better and less expensively.

It also allows firms to do more financial anaylsis internally, rather than consult with investment bankers for such matters as cash flow scenarios.

"When you rely less on Wall Street you can keep more proprietary information inside," said Chrysler's Mr. Capo, referring not only to financing but also potential acquisitions and divestitures.

With personal computers, Mr. Capo said, "We've been able to lessen the fishbowl effect of letting them (investment bankers) in on our thinking. If you tell the Street you are thinking about a debt or equity issue — just thinking about it — there's no end to the investment bankers knocking on your door."

Mr. Capo added, "Investment bankers that specialize in a product might do an analysis to slant it in favor of their product — I don't mean to imply anything unethical.

"Investment bankers are, above all, sales people. They are ultimately hoping to do the business."

In addition, Mr. Capo said Chrysler compares pro forma combinations of the corporation with potential acquisitions, projecting five years and looking at the profit potential and affordability of financing.

Among other things, he said, Chrysler uses the personal computer to view scenarios of stock splits, dividend policy, share repurchases and capital structure.

Personal computers generally mean analysis is done without pencil and paper.

"Before the personal computer, most of the work was done manually," said Mr. Tolson. "I can't think of an instance when we used the mainframe."

Doing things manually meant slower computation and less thorough analysis, mainly because of the sheer human limits to try to calculate numerous scenarios.

Mr. Capo, who said Chrysler used to rely on paper spreadsheets and time-sharing off mainframes, said the personal computer has improved the quality of analysis. "Now we can look at many more variables; there is greater sensitivity analysis."

He especially noted the improved presentations, such as for the finance committee, with charts and graphs. "Our work is only as good as you get someone to understand it," he added.

Maytag has had two IBM PC-ATs in corporate finance for a little more than a year, Mr. Tolson said. The company spent about $20,000 for them, including related equipment such as printers.

Lockheed has four personal computers — one IBM PC, two Compaq Deskpros that are the equivalent of the IBM PC-XT and a Compaq 286, the equivalent of the IBM PC-AT, Mr. Kokoszka said. He said Lockheed bought Compaqs because they are about 50% faster than equivalent IBMs.

Right now, Hartmarx is developing a model on its personal computers to project its monthly cash needs and financing sources, Mr. Condon said.

In addition, it plans to create a data base of financial and other statistics of other firms in the clothing industry for comparisons with Hartmarx, "so we can make a case" to securities analysts in presentations, Mr. Condon said.

Among other areas in which Hartmarx uses its personal computers is financial analysis, including a 10-year projection of its capital structure under various debt and equity ratios and various acquisition scenarios.

It compares the cost of leasing vs. buying and assessing loan terms. "Many times we get a variety of quotes from banks," Mr. Condon said. The personal computer "is useful in negotiating loans."

In addition, Hartmarx has put together a data base of its current and past loans. "Over time, it tells us who we are consistently borrowing money from and how their rates compare," Mr. Condon said.

Hartmarx uses personal computers for capital investment analysis. To evaluate potential profitability of project alternatives, Mr. Condon said Hartmarx compares the net present value of discounted cash flows.

In the recent move of its corporate headquarters, Mr. Condon said Hartmarx used the personal computer to compare the cost of office space and furnishings.

He said the computer helps evaluate the benefits of the purchase or sale of tax credits.

In addition, it helps monitor the performance of Hartmarx's operating units.

"If their bank loans are higher than they should be according to our model, we say, 'What is this? Why does it need more cash?' " ■

Trial and error gets . . .

Continued from page 14

"With the workstation, our whole routine is automated," he said, adding the system gathered information, parsed into a format and sent it to the mainframe.

But there are some little problems with the system that MicroStar's programming staff are still working on, he said.

The investment module, for example, can't yet handle some kinds of investments, such as floating-rate notes, tax-exempts and variable rate demand notes, he said.

However, MicroStar has said it has produced an improved version of its software and will shortly make this available to all users, he said.

Apart from that, Outboard Marine's system seems to suffer from a glitch similar to Ms. Graff's initial system: The bank account relationship manager module doesn't print out the way he wants it to.

If the operator requests a printout for a particular bank and that bank features five different calling officers, the printer will print the name of the bank along with the other details five times, with each calling officer listed separately, he said.

On the other hand, service and support was good, he said.

MicroStar also was given a high rating by the cash managers surveyed by Treasury Strategies.

As a rule, there seemed to be little dissatisfaction with the workstations, according to Mr. Poje. The average score was 45 out of 60.

However, of the 500 corporations interviewed, only 95 used treasury workstations, he said.

He added the survey team's definition of a treasury workstation excluded microcomputers set up to do automated balance reports in conjunction with a spreadsheet interface. ■

Pensions & Investment Age

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Carbide will invest guaranteed annuity assets

By Alan Krauss

DANBURY, Conn. — Union Carbide Corp. has negotiated a radical new form of annuity contract under which Prudential Asset Management Co. guarantees payment of liabilities of the $2.8 billion defined benefit plan Carbide terminated last year — without assuming management of the assets backing the annuities.

Under traditional annuity contracts, the issuing insurer invests, as part of its general account, the assets backing the annuities. Under the Carbide/Prudential contract, Carbide retains full discretion over the investment management of the assets, according to James A. O'Connell, Carbide assistant treasurer and director of pension fund investment services.

The new annuity goes much further than so-called "participating annuities," which allow the purchaser to share in any favorable investment or actuarial experience in connection with the annuities.

The contract issued by Prudential, Newark, N.J., allows Carbide to benefit from investment returns above those required to provide the annuities.

It covers liabilities accrued under the terminated plan through Sept. 30, 1985. Carbide recaptured $500 million in excess assets from the terminated plan, leaving $2.3 billion to back the annuity contract. The market value of the assets had increased to $2.5 billion by Dec. 31.

At the time it was terminated, the plan's liabilities were valued at $1.8 billion, but had increased to $2.2 billion by Dec. 31 because of declining interest rates. (The lower the interest rate, the more money is needed to purchase annuities to cover benefits.)

The two companies expect Prudential's guarantee will pass muster with federal agencies, which require annuities be purchased to to cover liabilities before excess assets may be recovered.

The Pension Benefit Guaranty Corp. issued a notice of sufficiency for the Carbide plan termination in November, a PBGC spokesman said. Following preliminary discussions with the Internal Revenue Service, "we were encouraged to file a revenue ruling request . . . (and) we believe they'll be favorably disposed," Mr. O'Connell said.

To compensate for the risk of guaranteeing the annuities, Prudential will receive an annual fee of about 25 basis points, based on the liabilities in the contract.

The annuity contract developed by Prudential at Carbide's request contains safeguards for the insurer.

"The contract is structured to turn on an asset-liability ratio . . . that is, the ratio of assets in the contract relative to the liabilities in the contract," Mr. O'Connell said. At year end, for example, when the contract covered $2.2 billion in liabilities and $2.5 billion in assets, the ratio was 1.13.

The contract requires a certain percentage of the assets to be invested in high-quality bonds or a dedicated bond portfolio, depending on the asset-liability ratio.

But Carbide's longstanding formal investment policy calls for it to segregate a pool of assets sufficient to cover expected benefit payments for five years. That money will be invested in a pool of AA rated bonds with maturities of less than 10 years.

This "contingency reserve," typically 25% to 27% of assets, meets the minimum requirement under the Prudential contract.

When the asset-liability ratio is above 1.2, the dedication requirement is replaced by Carbide's internal contingency reserve requirement. "When that ratio is above 1.2, we effectively have no constraints on our investment management," Mr. O'Connell said.

When the asset-liability ratio is between 1.15 and 1.2, Prudential requires half the liabilities in the contract to be covered by dedicated bonds. The forced dedication rises to

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Firms' early use of FASB rules boosts income

By Chuck Paustian

Several major corporations have improved their reported net income by using the Financial Accounting Standards Board's new pension accounting rules earlier than required.

Although the deadline for mandatory compliance is still at least a year away, many large companies have adopted FASB statements 87 and 88, all with positive results.

In addition, industry observers said many smaller companies also are complying early with the FASB statements, but they are more difficult to track because they often are privately held corporations.

Companies opting for early implementation generally have well-funded pension plans, which improves net income following adoption of the FASB rules, accountants and actuaries agreed.

They also said companies likely to be adversely affected by the accounting rules — those required to recognize an unfunded pension liability — generally will use the entire grace period to minimize the effect on their income statements.

Statement 87 outlines the process for calculating pension expense, separating it from the process used for funding the pension fund. Previously, these functions were calculated together.

Statement 88, related to the first guideline, deals with the accounting of curtailments and settlements of pension benefits.

Although the FASB statements were issued near the end of 1985, executives of E.I. du Pont de Nemours & Co., Wilmington, Del., were able to alleviate some of the deadline pressure through constant monitoring of the FASB's actions.

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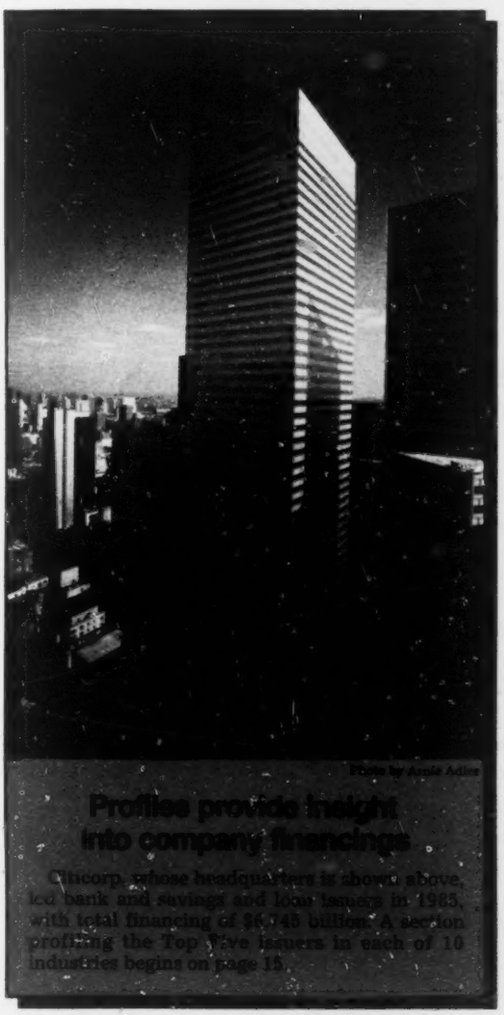

Photo by Annie Adler

Profiles provide insight into company financings

Citicorp, whose headquarters is shown above, led bank and savings and loan issuers in 1985, with total financing of $6.948 billion. A section profiling the Top Five issuers in each of 10 industries begins on page 15.

U.S. bond issuers returning to basics

By Marci Baker

The recent surge in the domestic new issues debt market is being accompanied by what some Wall Street officials believe could be a fundamental shift in corporate debt financing among higher quality issuers.

These companies are eschewing issues with special features and more esoteric instruments to raise capital through traditional fixed-rate debt securities.

The trend, which is expected to continue into the foreseeable future, has been fueled by the sharp drop in U.S. corporate bond yields — a drop that has brought financing costs to their lowest levels since interest rates began to climb in late 1979, investment bankers said.

The low yields sent U.S. corporate issuers flocking to the market to raise $13 billion in the two weeks ended March 1, bringing total domestic debt volume since the first of February up to just more than $20 billion.

A large portion of that came from companies with higher quality credit ratings such as Citicorp., General Motors Acceptance Corp., the World Bank and McDonald's Corp., which raised capital through straightforward fixed-rate debt issues.

"There's no question there's been a fundamental shift in the type of bond being issued," said Nancy Kimelman, an economist at Salomon Brothers Inc., New York. "Yields are very low right now and, as a result, the more conservative type of bond is coming to market. We're seeing very few issues that include special features."

Only $70 million of the $5.1 billion in new debt issues to come to market in the week ended March 1 and only $700 million of the about $15 billion issued in February represented floating-rate securities, she noted.

Corporate finance

Floaters accounted for 10% of total 1985 domestic debt volume and 22% of total 1984 volume.

The proportion of new issues rated AA or better climbed to 50% in February from 27% in all of 1985, according to Salomon research.

Issuers also are leaning toward longer-term maturities. Traditional long-term bonds maturing in 20 years or more accounted for 30% of February's volume, compared with 19% in 1985, Salomon reported.

"If you can get 10-year fixed-rate financing at 8¼% or 30-year financings priced through 9%, most corporate borrowers don't want to (bother) with bells and whistles that limit their financing flexibility," asserted James Stern, managing director at Shearson Lehman Brothers Inc., New York.

A few high-quality issuers, moreover, have offered 30- and 40-year issues that are non-callable for life. Two weeks ago, Atlantic Richfield Co., Los Angeles, raised $450 million with 30-year non-callable bonds yielding almost 9.9%, followed by a $200 million deal by the World Bank, New York, for 40-year non-callable debentures priced to yield just less than 9%.

In addition, Corning Glass Works, Corning, N.Y., raised $75 million in 30-year non-callable bonds priced to yield 8.95%.

"This was the first time we'd been in the public debt markets since 1982," said James Flynn, senior vice president and treasurer at Corning. He noted long-term yields presented an irresistible opportunity to pay off the company's outstanding commercial paper and raise working capital at low-cost, long-term rates.

According to Salomon, corpo-

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Money market analysts hit the mark with rate cuts . . . page 35

CBS liquidates stock portfolio

Director prompts sell-off of $300 million in equities

By Rose Darby

NEW YORK — The $500 million CBS Inc. defined benefit plan reportedly has liquidated its entire equity portfolio of about $300 million.

The liquidation apparently was undertaken to comply with a market-timing strategy initiated by Laurence A. Tisch, a member of the CBS board of directors, whose company, Loews Corp., owns 12.3% of CBS' outstanding stock.

Mr. Tisch did not return telephone calls. A CBS pension official would not comment on the report, saying only, "We obviously feel that whatever timing moves are made are proprietary to CBS."

After joining the CBS board in October, Mr. Tisch reportedly asked to review the pension fund's asset allocation and investment strategy.

Mr. Tisch was told the fund was 60% in equities, 30% in fixed income and 10% in real estate and venture capital, one industry insider said, and Mr. Tisch responded, " 'That's much too much in stocks,' and requested or insisted CBS put it into other investments."

At the time, the CBS fund had seven equity managers and one bond manager, and was invested in four real estate and four venture capital partnerships.

Meanwhile, the in-house pension investment staff had been built up during 1985. A five-year consulting relationship with Rogers, Casey & Barksdale Inc., Stamford, Conn., was severed, reportedly because the staff could make more decisions internally.

The equity liquidation began during the fall, when five of CBS' seven active equity managers reportedly were told to sell a total of $200 million in stocks. The managers were Fred Alger Management Inc., Alliance Capital Management Inc., BMI Capital Corp. and Lynch & Mayer Inc., all of New York, and Froley, Revy Investment Co., Los Angeles.

Most of the managers declined to comment or did not return telephone calls, though two said they no longer manage CBS assets.

Bankers Trust Co., New York, then was hired to index the assets to the Standard & Poor's 500 stock index, said one money manager familiar with the situation.

By early December, the Bankers Trust fund reportedly was in the process of being liquidated.

"They did the equity index fund with Bankers Trust in October, but then reversed themselves in late November, or early December," the money manager said.

By late 1985, Mr. Tisch was said to be unenthusiastic about the stock market and gave orders to the two remaining equity managers — Neuberger & Berman Pension Management and Sanford C. Bernstein & Co. Inc., both of New York — to sell off the fund's remaining equity positions as the market continued its rally.

Both managers said they could not verify or deny the report.

The liquidation reportedly took place rapidly throughout January. The cash that was raised is being managed in-house, sources said.

One observer close to the fund speculated on why Mr. Tisch might have ordered the market-timing strategy: "Larry Tisch . . . has told anyone and everyone what his feelings about common stocks are," he said. "He has no use for the stock market after it reaches a certain level, and that level is substantially lower than where the market is now."

"How long they will do this, and whether there is the possibility that they will roll the assets over with the money managers they let go, is not known," said one source.

"All I know is a lot of heartache was incurred by this on the part of the CBS pension fund staff, because they were always very disciplined in their decision-making approach," he said.

"The broader issue here is, first, does market timing work? And second, what role should a director play in making a market-timing, all-or-nothing decision such as this one?

"There's a difference between simply hedging a portfolio and this kind of thing," he said.

According to David M. Walker, deputy assistant secretary for pension and welfare benefits at the Department of Labor, the named fiduciary is authorized to make decisions on asset allocation and investment strategy.

The Employee Retirement Income Security Act's "structure contemplates that all fiduciaries have a responsibility to ensure that any instructions given about the pension fund are not in conflict with the law and that it conforms with ERISA, including prudence," Mr. Walker said.

"Whenever one is dealing with someone with a certain amount of stock, they obviously have the ability to influence both the management of the company and the management of the pension plan," he said. "There is a process that must be followed in order to conform with ERISA.

"Ultimately, fiduciaries have to make decisions based upon what is in the interest of the plan and plan participants and beneficiaries," he said. "But they have to make the independent decision that asset allocation and investment strategy are in the interests of the plan." ■

Reporter Ed Christman also contributed to this story.

LBO investment boom is waning; funds stay with established firms

By Chuck Paustian

Interest among pension executives in leveraged buy-out funds is waning, and those funds making investments are going with established firms.

Firms that have been offering leveraged buy-out pooled funds for years now control the vast majority of the $3 billion in pension assets *Pensions & Investment Age* estimates is allocated to leveraged buy-outs.

Indeed, the sheer size of these pooled funds, coupled with the furious pace at which they have been organized, might have exhausted the pension market, leaving few dollars to be allocated to new funds.

The new tax-exempt dollars being allocated in the area mostly are from pension funds that have invested previously in leveraged buy-outs.

Those investors mainly are choosing the established partnerships of the major investment banking firms.

As a result, firms and individuals making inaugural attempts at organizing limited partnerships for the purpose of investing in leveraged buy-outs are having a difficult time lining up institutional investors.

Among the dozens of firms doing leveraged buy-outs, Kohlberg Kravis Roberts & Co., Forstmann Little & Co. and Merrill Lynch Capital Markets, all in New York, are the biggest. KKR's limited partnership fund, for example, has almost $2 billion in assets, mostly pension money.

Continued on page 48

3 commit assets to venture capital

By Trudy Ring

At least three more tax-exempt funds have made commitments to Palmer Organization III Limited Partnership, a venture capital fund in Woburn, Mass.

The $400 million Cincinnati Bell Telephone Inc. pension fund, Cincinnati, will invest $2 million in its first venture capital investment, said Richard L. Dewey, secretary and treasurer.

"Over the next five years, we would like to get 5% (of pension assets) in venture capital," Mr. Dewey said. The fund probably will commit to one more partnership this year, he said.

Venture capital will diversify the fund's asset mix further. He said fund officials chose the Palmer Organization because it is well staffed, has a good investment record and participates in a variety of industries.

The Palmer partnership plans to raise between $25 million and $30 million, with closing April 30. It will invest in companies in their early stages. It is not limited to any specific industry or geographic area, a spokesman said.

Another investor in the partnership is the $800 million Mayo Foundation, Rochester, Minn. The foundation, which also participated in Palmer Organization's two earlier partnerships, committed $1 million to the new fund, said John Herrell, treasurer. He said the foundation invested in the new fund largely because of its experience with the Palmer Organization's previous partnerships.

The $1.3 billion Stanford University endowment fund, Palo Alto, Calif., committed $1 million to the Palmer partnership in February, a spokeswoman said.

The Palmer partnership was one of five chosen by the $1 billion Massachusetts Pension Reserve Investment Trust for its first venture capital investments (*Pensions & Investment Age*, March 3). Other investors are insurance companies and individuals. ■

Filtrona sets 7-plan master trust

By Ed Christman

RICHMOND, Va. — The American Filtrona Corp. has consolidated seven defined benefit plans into an $11 million master trust, hiring a master trustee and two balanced managers, said John D. Barlow Jr., vice president-finance.

The master trustee is Wachovia Bank & Trust Co., Winston-Salem, N.C. The balanced managers are Lowe, Brockenbrough, Tierney & Tattersall Inc., Richmond, and First Union National Bank Capital Management Group, Charlotte, N.C.

Mr. Barlow didn't say how much each manager received.

One plan is sponsored by American Filtrona and six by subsidiaries, including United Air Cleaner Co., Chicago; United Engine Life Co., Santa Fe Springs, Calif.; Dollinger Corp., Rochester, N.Y.; Southern Plastics Co., Columbia, S.C.; and Technolab Inc., Stanley, N.C.

The assets in six of the plans were in immediate participation guarantee and deposit administration contracts with Union Mutual Life Insurance Co., Portland, Maine, and CIGNA Asset Advisers Inc., Hartford, Conn.

The Dollinger plan, with about $1.5 million in assets, was in a balanced account with Marine Midland Bank, New York.

Mr. Barlow said the fund switched to a balanced approach to increase returns.

The company has not set any constraints on the asset mix, giving the managers discretion, he said. No consultant was used.

A profit-sharing plan, with about $3 million in assets managed by Chase Investment Counsel Corp., Charlottesville, N.C., was unaffected by the restructuring. ■

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* February indexes**

	Latest mo.	Year to date	Trailing 12 mos.
S&P 500	7.48	8.07	30.52
Russell 3000[1]	13.63	8.87	30.33
Ryan Index[2]	5.31	5.83	31.61
Shearson Lehman Gov't./Corp.[2]	4.19	4.80	26.83

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

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The 50 largest issuers

Courtesy of People Express Airlines Inc

People Express added $324 million in debt to its books during 1985.

1985 worldwide public offerings
(top 5 issuers)

Industry	Top 5 ($ mil.)	% total industry	Debt. ($ mil.)	Equity ($ mil.)
Finance cos.	17,643	28.0	17,643	0
Banks/S&L's	10,925	39.9	9,876	1,049
Manufacturing	5,994	19.1	5,994	0
Utilities	4,039	28.2	3,368	671
Service cos.	3,408	24.3	2,518	890
Natural resources	4,957	59.5	4,957	0
Retail	2,220	34.4	1,997	223
Transportation	1,372	46.7	1,159	213
Health	1,806	64.3	1,139	667
Rail/shipping	1,043	62.5	1,043	0
TOTAL	53,407	31.1	49,694	3,713

Source: IDD Information Services, New York

Top financings grab one-third of world volume

By Marci Baker

THE TOP FIVE U.S. issuers in 10 broad industries accounted for more than a third of the worldwide public financing volume in 1985, according to numbers generated by IDD Information Services for *Pensions & Investment Age*.

These 50 largest issuers, however, made up less than 10% of funds raised last year through the private placement arena. U.S. issuers overall raised $172 billion in the worldwide public markets last year, while private placement volume rose to almost $74 billion, IDD reported. (First Boston Corp., Merrill Lynch Capital Markets and Goldman, Sachs & Co. declined to provide numbers of mortgage-related, certificates of deposit and registration rights issues for the last half of 1985, however).

Just more than $53.4 billion, or 31.1%, of publicly underwritten volume was raised by the Top 50 issuers, according to IDD. These companies also raised $5.5 billion in the private markets, representing 7.5% of total volume there.

The ranking of U.S. corporations within each of 10 industries was based on their public financing activity both in the U.S. and overseas markets. Only firmly underwritten deals were included in the universe, whose dollar volume is on a net proceeds basis. All tranches in collateralized mortgage obligations, in addition, were counted together as a single issue.

A company's industry classification was determined by IDD based on what business lines generated the greatest percentage of revenue.

Not surprisingly, finance companies, along with banks and savings and loans, were the most active issuers in the public markets last year, given the relative size of these institutions and their on going need to raise capital. Together, the two industries accounted for more than half of the overall U.S. issuer financing volume.

The leading finance company issuers, lead by General Motors Acceptance Corp., accounted for 28% of the $62.8 billion generated in that industry, while offerings by the Top Five banking issuers, led by Citicorp, represented 39.9% of total public financings by banks and savings and loans.

A third major area of public financing activity came from manufacturers, which accounted for 18.3% of total 1985 volume. The Top Five issuers in this industry generated almost $6 billion in the public markets, ranking third among the leading issuers in other industries.

Mergers and acquisitions were responsible for a large portion of that volume. Philip Morris Inc., R.J. Reynolds Industries Inc. and Procter & Gamble Co. were three of the Top Five issuers in the manufacturing arena.

Most of their capital-raising stemmed from efforts to refinance debt associated with acquisitions valued at more than $1 billion.

Among other highlights are:

•The least active issuers, in terms of dollar volume, were those in the transportation, health care and rail and shipping industries. Together, their largely domestic public offerings accounted for only 4.3% of all financing volume.

At the same time, the financing volume generated by the five leading issuers in each of these market segments represented a huge portion of their respective industry volume. The Top Five issuers in the health care and rail and shipping segments, for example, accounted for 64.3% and 62.5%, respectively, of all public financings in those industries.

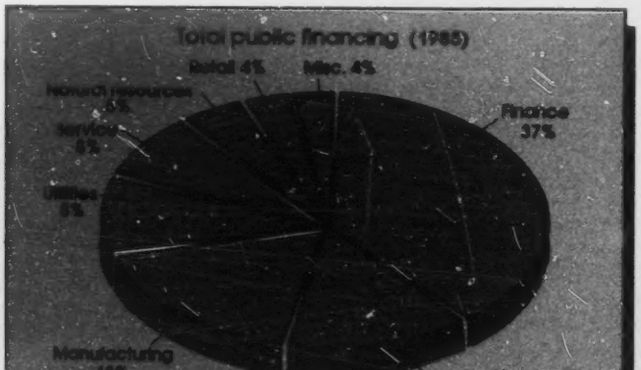
• The largest issuers in the service and retail industries got there as a result of highly leveraged acquisitions. SCI Holdings Inc., the shell company established for the leveraged buy-out of Storer Communications Inc., raised $1.2 billion in the domestic debt markets last year. Pantry Pride Inc., the largest retail company issuer, raised its almost $700 million to finance the purchase of Revlon Inc.

• Under the declining interest rate environment, issuers showed signs of leaning more toward "plain vanilla" and longer-term issues. The 50 largest issuers raised $28 billion last year through straight fixed-rate issues.

According to IDD, the average to maturity for all issuers last year increased slightly, to 13.5% from about 11% in 1984.

• The leading banks, finance and manufacturing issuers were the most active issuers overseas, while the Top Five in the retail and transportation industries were among the least active. Overall, the largest 50 issuers raised $13 billion in 102 public offerings outside the United States. More than $10 billion of that was dollar-based debt while about $3 billion was non-dollar issues. ■

Courtesy of Burlington Northern Inc



Courtesy of Chrysler

Finance

General Motors Acceptance Corp.

Total public offerings	$5,645,418,000
No. of issues	27
Debt	$5,645,418,000
No. of issues	27
Private placements	$5,200,000
No. of issues	2
Total financing for 1985	$5,650,618,000
Key underwriters	Morgan Stanley, Merrill Lynch, First Boston, Salomon

DETROIT — GMAC used four new types of financing last year.

Robert C. Almon, vice president-worldwide borrowing, said GMAC, as one of the largest issuers every year, has a policy of seeking "the broadest investment base" by searching for new investors and new financing instruments.

In December, GMAC became the first of the automobile companies' financing subsidiaries to securitize its car loans for sale in the capital markets.

GMAC raised $522 million, offering 8.45% notes that were priced just a fraction under par. With early payments of principal likely, he estimated their life at 1.9 years, although their maximum maturity is five years.

In January, GMAC raised another $423 million, selling its second securitized auto loan notes at a slightly higher rate of 8.55%.

Mr. Almon expects GMAC to sell more such notes, but he does regard the instruments as still "very experimental" for the firm, whose main purpose is to provide financing for buyers of General Motors Corp. products. He noted the nearly $1 billion raised in the two securitized note offerings amount to a fraction of the $74 billion of auto loans GMAC holds.

He said GMAC decided to try asset-backed financing because "selling the loans is a perfect hedge and because its cost of capital is competitive.

"To the extent you'd like to hedge part of it (the auto loan portfolio), this is the only way to do it."

Otherwise, he said, "There is no way to hedge a retail installment contract. There is no hedging instrument that trades with retail (loan) rates."

The securitized offerings, both done domestically, sold at about 65 basis points above the comparable Treasury rate and slighly higher than GMAC's conventional two-year notes that generally sell at 50 basis points above the Treasury rate, he said.

He said even though the securitized notes have the same credit rating as GMAC's other securities (AA+), the asset-backed issues have a wider yield spread because the interest and the principal is passed through to holders only at the end of the month rather than daily for administrative convenience.

Even though the interest rate is higher on the securitized notes, Mr. Almon said its overall cost of capital is competitive with its conventional notes because the asset-backed securities require no equity. When GMAC leaves auto loans on its books, he said, it requires $1 of equity to support $9 of receivables. First Boston Corp. underwrote both issues.

With issues in January and July 1985, GMAC sold its first yen-denominated debt, raising a total of $192.5 million. Mr. Almon said GMAC was attracted to the new market because the issues, both five-year maturities, have rates slightly below its commercial paper rates.

He said the swap of the floating-rate yen for floating-rate dollar helped make the offerings attractive. "When you swap for dollars, you often come up with dollar rates that are at a lower cost than borrowing in dollars," he added. Mr. Almon expects the yen market to remain attractive this year as well.

GMAC raised a total of nearly $81 million in two issues of pound sterling, both sold offshore, although the proceeds were for use in the United Kingdom. GMAC hadn't done such an offshore offering before, he said, because "there is a problem of accessing the offshore (sterling) market for domestic U.K. use."

As with the sterling offerings, GMAC found that borrowing lira was cheaper offshore than in the Italian markets. As in the case in the United Kingdom, he said, the Italian government central bank is relaxing regulations to encourage such offshore financing for domestic U.K. and Italian use. GMAC sold $43.5 million in five-year lira notes for use in GM's Italian operations. GMAC used BankAmerica to manage the issue, he said.

In addition, a GMAC unit issued $6.2 million in three-year 9% Luxembourg franc notes in two private placements sold in Luxembourg in September. The issues were GMAC's only private placements during the year. Mr. Almon said the financing was done for GM's Belgium operation, which has some Luxembourg assets.

At year-end 1985, he said GMAC's debt-to-equity ratio was about 12 to 1. Typically, the rating agencies use a 10-to-1 target, he said, adding the ratio "should be self-correcting" in 1986. The higher leverage didn't affect GMAC's rating, however.

Mr. Almon said he doesn't expect GMAC to raise as much money this year as it did in 1985, although it depends on GM auto loan incentives.

To manage offerings, he said GMAC mainly uses Morgan Stanley & Co., Merrill Lynch Capital Markets, First Boston Corp. and Salomon Brothers Inc.

Ford Motor Credit Co.

Total public offerings	$3,829,709,000
No. of issues	29
Debt	$3,829,709,000
No. of issues	29
Private placements	$0
Total financing for 1985	$3,829,709,000
Key underwriter	Goldman, Sachs

DETROIT — Ford Motor Credit Co. raised $2.6 billion in the U.S. public markets in 15 transactions ranging from about $100 million to $250 million.

Among its more noteworthy U.S. deals was a $100 million offering in November of maximum-rate notes — a new instrument developed by Merrill Lynch Capital Markets. The 10¾% coupon set on the Ford Credit offering is the maximum rate buyers receive on their investment. However, the interest rate paid to investors will begin to fall if the London Interbank Offered Rate rises above 10.5%. For each basis point climb in LIBOR above that level, the rate on the notes declines by a like amount.

Ford Credit, however, will pay a fixed 10¾% throughout the life of the seven-year non-callable notes. Interest investors forgo if LIBOR exceeds 10.5% will be paid to Merrill Lynch.

Because the underwriter paid Ford Credit an unspecified amount to collect that interest, the issuer was able to save at least 50 basis points in financing costs compared with more conven-

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tional financing.

While the maximum-rate note offering provided one avenue of cheaper financing in the domestic arena, savings on financing costs prompted Ford Credit to turn to the overseas markets to raise $1.2 billion throughout the year.

The issuer raised almost $750 million in seven Eurodollar offerings of between $100 million and $150 million each. Coupons on the five- to 10-year issues ranged from 10.5% to 12%.

Ford Credit raised another $496 million in seven swap-driven deals denominated in foreign currencies, including yen, Swiss franc, deutsche mark, European Currency Unit and Australian and Canadian dollars. The company's two yen offerings of about $105 million apiece and one Swiss franc deal, totaling $78.3 million, were dual-currency transactions in which interest is payable in the stated currency and principal is redeemed in dollars based on a preset exchange rate.

Ford Credit's other non-dollar offerings ranged from $36 million to $77.2 million. Its non-dollar transactions carried coupons of between 7% and 12⅞%, while maturities ranged from five to 10 years.

Goldman, Sachs & Co. was lead underwriter in 20 of its 29 offerings for the year. Underwriters tapped to lead other deals included Merrill Lynch, Credit Suisse First Boston, Daiwa Securities and Banque Paribas Capital Markets.

Chrysler Financial Corp.

Total public offerings	$3,327,323,000
No. of issues	29
Debt	$3,327,323,000
No. of issues	29
Private placements	$132,387,000
No. of issues	3
Total financing for 1985	$3,459,710,000
Key underwriters	varied

DETROIT — General business growth and low-cost programs to finance U.S. car sales were among the motivations that led Chrysler Financial Corp. to tap the public and private markets to the tune of $3.3 billion in 1985.

Given its frequency in the markets, the type of deal Chrysler Financial arranged hinged mainly on which market provided the cheapest cost.

To that end, the finance company raised capital in the foreign markets in 15 out of its 29 public offerings in 1985 and generated $917 million from these deals.

About $467 million of the capital it raised overseas came from 10 transactions denominated in foreign currencies, including the European Currency Unit, Swiss franc and Canadian, Australian and New Zealand dollars.

Amid uncertainty over the course of Treasury rates in late July, Chrysler Financial rolled out two public, non-dollar denominated issues: an ECU 75 million offering of seven-year subordinated bonds and a $50 million (N.Z.) offering of five-year senior subordinated notes to raise $92.5 million.

At the same time, Chrysler Financial raised another $45 million through the private placement of seven-year notes denominated in Swiss francs.

The three deals carried coupons of 9%, 17% and 5.75%, respectively. Chrysler's non-dollar deals, however, have been fully hedged and swap-driven to achieve cheaper dollar-based financing.

Non-dollar deals ranged from $17 million to $75 million, while the company's two floating-rate and three fixed-rate Eurodollar financings ranged from $25 million to $250 million. Its Eurodollar deals raised just more than $450 million for Chrysler Financial.

Still, the bulk of the company's capital raising efforts — $2.4 billion — stemmed from 14 domestic offerings of fixed- and floating-rate as well as zero-coupon obligations.

Its largest public domestic deals included a $400 million offering of 9.8%, three-year notes issued in November and a $300 million offering of extendable notes in April that carried an initial 11.5% coupon and a 12-year final maturity.

In addition to its Swiss franc deal, Chrysler Financial's other private placements included a 200 million deutsche mark offering of 7.25%, five-year notes, raising $65.5 million. It also completed a $22 million private placement of senior notes.

Lead underwriters on the company's deals included Salomon Brothers Inc., Merrill Lynch Capital Markets, First Boston Corp., Smith Barney, Harris Upham & Co., Swiss Bank Corp. International and Banque Paribas Capital Markets.

Federal Home Loan Mortgage Corp.

Total public offerings	$2,664,176,000
No. of issues	6
Debt	$2,664,176,000
No. of issues	6
Private placements	$329,210,000
No. of issues	31
Total financing for 1985	$2,993,386,000
Key underwriter	Salomon Brothers

WASHINGTON — The Federal Home Loan Mortgage Corp. raised almost $3 billion in the public and private markets during 1985. The lion's share of that — almost $2.7 billion — was generated from six public offerings in the United States and abroad.

Freddie Mac's biggest month was November, when it came to the U.S. market with a $689.3 million six-tranche collateralized mortgage obligation deal. With spreads between Treasuries and the Eurobond market narrowing, it issued another $356 million of bonds overseas a day later.

Coupons on the CMO ranged from 8⅛% for the first tranche of securities due March 1987 to 11% for the sixth class of 30-year obligations. The largest tranche — $247 million — represented 9⅛% bonds due March 1990.

Overseas, Freddie Mac issued $250 million of 18-year securities with a 10⅛% coupon and $100 million of 10-year Eurobonds with a 10% coupon. The deals were priced at 102 and 101.46, respectively, and sold to Japanese investors through Nikko Securities as well as to Europeans. Net proceeds totaled $356.5 million.

A third overseas offering in September consisted of 10¾%, 15-year bonds totaling just more than $100 million.

Freddie Mac also issued participating certificates in two deals: 10¾% instruments due in 2000, totaled $694 million, and a serial offering with a 30-year final maturity, totaled $824 million.

In the private market, Freddie Mac raised $329.2 million through 31 private placements, the bulk of which consisted of pass-through certificates. All were 30-year deals and ranged from $1.4 million to $67 million.

Salomon Brothers Inc. was lead manager for the public and private transactions. Other underwriters on the public offerings were Nikko, First Boston Corp., Credit Suisse First Boston and Merrill Lynch Capital Markets.

Phibro-Salomon Inc.

Total public offerings	$2,176,096,000
No. of issues	14
Debt	$2,176,096,000
No. of issues	14

Private placements	$0
Total financing for 1985	$2,176,096,000
Key underwriter	Salomon Brothers

NEW YORK — While Phibro-Salomon Inc.'s own fund-raising activities placed it second among service companies, the mortgage-related financing activities of Salomon Brothers Inc. put the firm fifth among finance companies.

Salomon, via such mortgage entities as Salomon Brothers Mortgage V and Salomon Capital Access, raised almost $2.2 billion in 14 overall transactions.

Twelve of the 14 offerings were collateralized mortgage obligations (all tranches in a CMO are counted as one transaction) ranging from $8.5 million to almost $600 million in volume. Final maturities ranged from 25 to 30 years. Total net proceeds were $1.85 billion.

The remaining $322 million came from two offerings of 10.5% pass-through certificates due Nov. 1, 2000 and Sept. 1, 2001.

Banks/S&Ls

Citicorp

Total public offerings	$6,231,234,000
No. of issues	40
Preferred	$575,000,000
No. of issues	7
Debt	$5,656,234,000
No. of issues	33
Private placements	$514,600,000
No. of issues	5
Total financing for 1985	$6,745,834,000
Key underwriters	various

NEW YORK — Citicorp's most unusual offering in 1985 was probably a 50-year, subordinated, floating-rate Eurodollar bond.

"We're going to have a party if we are still alive then" in 2035 when it matures, said Robert M. Butcher, vice president.

The offering, managed by Merrill Lynch Capital Markets, was sold in October and raised $350 million. Its rate is 22.5 basis points above the one-month London Interbank Bid Rate. LIBID, he noted, is typically 12.5 basis points below the London Interbank Offered Rate. Citicorp's issue pays about 10 basis points above LIBOR.

"Fifty years is a nifty deal," Mr. Butcher said. It was the longest debt issue ever by Citicorp. "But it wasn't like it was a new type of security," Mr. Butcher said, noting some British banks have sold perpetuities — debt that never matures.

The deal reveals a timid aspect to Citicorp's financing policy. Although it is one of the largest public issuers and is willing to try different financing techniques, Mr. Butcher said Citicorp prefers to let others test new securities and new markets first.

In 1986, Citicorp sold its first reverse-floating-rate notes in February. The five-year domestic issue pays 9¼% the first six months; thereafter it will pay semiannually 17⅜% less the six-month LIBOR. Thus, when LIBOR rises, Citicorp will pay less interest and when it falls, it will pay more.

Salomon Brothers Inc. managed the reverse-rate note offering.

Mr. Butcher said Citicorp sold the notes, not to match the peculiar rate with particular liabilities, but because of an opportunity to achieve, ultimately after some swaps, a less expensive "plain vanilla" floating-rate debt.

In 1985, he said Citicorp re-entered the Australia market for the first time in about six years, raising a $26.7 million (U.S.) worth of Australia currency for use in Citicorp's operations there. The terms of the 13½%, three-year guaranteed notes call for the interest and principal to be paid in U.S. dollars.

The Australian deal was the only foreign currency-denominated financing the worldwide-operating Citicorp did among its total 45 public offerings and private placements in 1985. Ten of the 44 U.S. dollar-denominated financings were in Euromarkets, though.

Mr. Butcher said the lack of foreign currency-denominated offerings "may be partly (due to) the strength of the dollar. When we get involved in foreign currency deals, it's usually because there is a specific need for the foreign currency, or there is an attractive rate."

In any case, he said Citicorp's "bread and butter" financing comes from unsecured U.S. dollar-denominated debt.

Citicorp sold its first dutch auction-rate preferred stock last year, raising a total of $575 million in seven offerings. The dutch auction shares marked Citicorp's return to offering preferred stock and added significantly to Citicorp's capital, doubling the total amount of preferred stock, including previously sold adjustable-rate preferred stock, it now has outstanding.

Shearson Lehman Brothers Inc., which pioneered dutch auction preferred underwriting in 1984, managed all seven of Citicorp's dutch auction preferred stock offerings.

With the preferred stock and certain debt financings, Mr Butcher said Citicorp improved its capital-to-assets ratios. Preferred stock counts as primary capital and debt with an initial maturity of at least seven years qualifies as secondary capital. "Some the debt issues were aimed at improving the capital ratio," Mr. Butcher said.

At the end of the year, Citicorp's primary capital-to-total assets ratio improved to just below the average for money center banks, 6.23%, up 37 basis points. Its total capital-to-total assets ratio was 9.12%, up 1.33%; a ratio Mr. Butcher called "exceptional" in the industry. The better ratios didn't change Citicorp's senior debt credit rating, which stayed, respectively, Aa 1 and AA by Moody's Investors Service and Standard & Poor's Corp.

Except for pass-through certificates, he said none of Citicorp's financing was driven by any particular transaction or acquisition.

Together Citicorp and its Citibank unit sold $1.5 billion in 10 public offerings and five private placements of pass-through certificates. The pass-throughs accounted for Citicorp's only private placements and Citibank's only offerings, public and private. All the private placements are registered, Mr. Butcher said.

Speaking of Citicorp's total financings in general, Mr. Butcher said, "For 1986 my estimate is we would be active but a little bit less so (than in 1985). That's just a function of what we perceive as growth."

Manufacturers Hanover Corp.

Total public offerings	$1,549,180,000
No. of issues	12
Preferred	$250,000,000
No. of issues	4
Debt	$1,299,180,000
No. of issues	8
Private placements	$50,000,000
No. of issues	1
Total financing for 1985	$1,599,180,000
Key underwriters	various

NEW YORK — Manufacturers Hanover raised $250 million through an offering of dutch auction-rate preferred stock in July — the largest single offering of the variable rate preferred security up to that time.

The securities were offered in four series of $62.5 million each at an initial rate of 6⅜%. Shearson Lehman Brothers Inc. was the underwriter.

The bank used the proceeds to redeem an outstanding issue of adjustable-rate preferred stock. The refunding has saved the bank 400 to 500 basis points, or about $1 million a month in dividend costs.

The bank also raised just less than $1.3 billion in eight debt offerings, $1 billion in floating rate obligations and $300 million in straight notes. In addition, $650 million of its floating rating financing was raised in the Eurobond markets in four issues.

Its single private placement for the year was a $50 million senior note deal managed by Bankers Trust Co.

Manufacturers Hanover tapped Merrill Lynch Capital Markets, Morgan Stanley & Co., Goldman, Sachs & Co. and Salomon Brothers Inc. as lead underwriters for individual public debt offerings.

Wells Fargo & Co.

Total public offerings	$1,214,665,000
No. of issues	9
Debt	$1,214,665,000
No. of issues	9
Private placements	$0
Total financing for 1985	$1,214,665,000
Key underwriters	various

SAN FRANCISCO — Wells Fargo was among U.S. and foreign issuers last year to try out a new type of instrument — floating-rate notes with stripped interest rate caps.

Wells Fargo did at least two offerings of the securities in the U.S. and Euromarkets.

A $100 million domestic issue of the floaters, managed by Salomon Brothers Inc., carried a 12-year maturity and a 13% interest rate cap, a slightly higher rate than the bank would have had to pay on an equivalent fixed-rate issue.

According to the security's structure, issuers agreed to pay more than the cap if interest rates exceed that level. They typically sold the right to collect the amount over the cap to unidentified counterparties in exchange for an upfront, lump-sum payment used to reduce overall financing costs on the issues.

Wells Fargo's offerings of these securities was in line with its overall financing activities during the year. All but one of its nine public offerings were floating rate securities; most of those issues were placed in the overseas markets.

The bank's only non-dollar deal, denominated in deutsche marks, raised $115.6 million. The 1.75 billion deutsche mark deal in November, which came amid a wave of issues denominated in the German currency, carries an interest rate that floats at the three-month London Interbank Offered Rate plus 0.125%.

Meanwhile, Wells Fargo's lone fixed-rate deal for the year was a $100 million domestic offering of seven-year notes. The 9.5% notes were priced at 99.2 to yield 9.66%.

Underwriting managers for the banks various deals were Salomon Brothers, Morgan Stanley & Co., Goldman, Sachs & Co., Commerzbank and Credit Suisse First Boston.

Security Pacific Corp.

Total public offerings	$1,005,324,000
No. of issues	12
Common stock	$74,063,000
No. of issues	1
Preferred	$150,000,000
No. of issues	2
Debt	$781,261,000
No. of issues	9
Private placements	$136,000,000
No. of issues	4
Total financing for 1985	$1,141,324,000
Key underwriters	various

LOS ANGELES — The strong stock market prompted Security Pacific to issue 2.5 million new common shares in early December. The $74 million deal, priced at 29⅝ a share, was one of only three equity offerings issued by the bank in 1985.

Security Pacific raised another $150 million through two $75 million issues of dutch auction-rate preferred in September. The initial dividend on the offerings, which is reset every 49 days in a dutch auction, was 5⅜%.

The majority of the bank's financing for the year — $781 million — came from fixed- and floating-rate offerings done in the United States and abroad.

Among its floating-rate issues was an October offering of floating rate notes denominated in deutsche marks. The rate on the notes, which raised $115 million are pegged to the six-month London Interbank Offered Rate and have a 10-year final maturity. Another $350 million was raised through offerings of seven- and 12-year floating rate issues.

Security Pacific's two domestic debt deals totaled $66 million. Both issues were four-year, fixed-rate obligations, one with a 9⅜% coupon and the other with an 8¾% coupon.

Security Pacific Australia, meanwhile, raised about $215.3 million in

$57,000,000

Municipality of Anchorage, Alaska

Pension Financing Program

Goldman Sachs through its Municipal Finance Department and its Pension Services Department assisted the Municipality in the implementation of this program.

Goldman, Sachs & Co.

New York Boston Chicago Dallas Detroit
Houston Los Angeles Memphis Miami
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London Hong Kong Tokyo Zurich

Goldman Sachs

February 21, 1986

four deals, two of which were denominated in Australian dollars, one in European Currency Units and one in U.S. dollars.

Its first Australian dollar deal was a $40 million extendable note offering with an interest rate reset date in 1990 and a 10-year final maturity. The other was a $36.7 million offering of 14% notes due in 1988.

The ECU offering of five-year notes carried an 8¾% coupon and raised $79.4 million. Just more than $100 million was raised through a 9⅞%, five-year Euronote issue.

Security Pacific National Bank also raised $136 million through four private placement of certificates of deposit maturing between 1986 and 1988 during the year.

Lead underwriters on the various public offerings included First Boston Corp., Credit Suisse First Boston, Salomon Brothers Inc., Shearson Lehman Brothers Inc., Morgan Guaranty Trust, Banque Paribas Capital Markets, Commerzbank and Orion Royal Bank.

Bankers Trust New York Corp.

Public offerings	$924,580,000
No. of issues	6
Debt	$924,580,000
No. of issues	6
Private placements	$185,000,000
No. of issues	5
Total financing for 1985	$1,109,580,000
Key underwriters	Bankers Trust, Merrill

NEW YORK — Bankers Trust New York's public market financing activities in 1985 included three domestic and three overseas deals, raising a total of $925 million.

Among its debt offerings was a new instrument created by Merrill Lynch Capital Markets — maximum-rate notes whose coupons decline if the London Interbank Offered Rate rises above a specified level.

Bankers was the first to come out with the new security in a $100 million offering in mid-November. The seven-year, non-callable notes sold at par at 10⅝%.

That interest rate paid to investors will decline if LIBOR ultimately rises about 10.5%. For each basis point LIBOR climbs above that level, the rate on the notes will fall by an equal amount.

Bankers, however, continues to pay 10⅝% because Merrill paid Bankers an up-front sum to receive the interest that investors would forgo if LIBOR rises to high. As a result, that maximum rate note offering was estimated to save Bankers at least 50 basis points over conventional financing.

The bank's two other domestic deals included a $150 million offering of 9¼% notes due in 1988 and a $100 million offering of floating-rate subordinated debentures due in 1992.

The issuer raised another $375 million in two floating-rate Euronote deals, one with a five-year final maturity and the other with a 15-year final maturity. Both issues carried interest rates tied to the three-month LIBOR rate.

Its third Euromarket deal, a five-year depository note issue with a 11⅛% fixed-rate coupon, raised just less than $100 million.

In the private markets, Bankers did four variable-rate certificates of deposits deals and a $25 million mortgage-backed note issue.

Merrill Lynch Capital Markets was the underwriter on Bankers' domestic offerings. The bank itself was the agent in the private deal and the lead manager in the overseas offering.

Manufacturing

Chrysler Corp.

Total public offerings	$1,441,875,000
No. of issues	3
Debt	$1,441,875,000
No. of issues	3
Private placements	$0
Total financing for 1985	$1,441,875,000
Key underwriter	Salomon

DETROIT — In its financing highlight of 1985, Chrysler Corp. raised $795 million in November, selling the largest single issue of 30-year, fixed-rate debentures ever by an industrial company.

The issue of the 12% debentures, which sold at a fraction under par, illustrates more than just Chrysler's return to financial health. It shows an eagerness to exploit the market to pile up cash.

In February 1985, Chrysler sold its only other offerings, a two-tranche issue, consisting of $350 million in 12¾% seven-year notes and $300 million in 13% in 12-year debentures.

The three issues, all domestic and underwritten by Salomon Brothers Inc., were done solely for opportunistic reasons.

"Opportunistic sounds a little loose, but opportunistic would not be an inappropriate word," said W. Frank Fountain, assistant treasurer.

"Our philosophy is that the best companies borrow money when they don't necessarily need it, but market conditions are favorable," he said.

As a result, he said Chrysler looks to the capital market when interest rates are falling and when potential investors are salivating over recent reports of rising corporate profits.

Mr. Fountain said Chrysler exploited such conditions, including record annual and quarterly earnings, in both the respective February and November offerings, to sell them at a great demand and low interest cost.

In the 30-year debentures, he said Chrysler sold the maximum amount authorized by its board of directors' financing range of $500 million to $800 million.

Speaking about the year's financing, Mr. Fountain said, "Chrysler had no apparent need to get the money.

"We thought we'd go out and get funds and put them away for general corporate purposes," such as acquisitions or to guard against a potential recession, he added.

As it turned out, one purpose was the acquisition of Gulfstream Aerospace Corp. for $641.8 million.

For the stock, Chrysler paid $324 million in cash and exchanged $327.8 million in registered debt securities. The debt, which all went to Alan Paulson, Gulfstream's controlling holder, was in three tranches — $100 million of 9.9% three-year notes, $127.8 million of 10.55% five-year notes and $100 million of 11.04% seven-year notes.

Chrysler is seeking further acquisitions, Mr. Fountain said, although nothing specific has been identified.

In addition, Chrysler recently announced it would buy back 25 million shares of its common stock in the open market over an unspecified period. At recent prices, that would total $1.4 billion, about equal to Chrsyler's debt financings in 1985.

For financing in 1986, Mr. Fountain said, "We don't anticipate going into the debt (or equity) markets." But nothing precludes it from doing so should the opportunity arise, he added.

Chrysler's debt rating held at BBB during the year.

Philip Morris Inc.

Total public offerings	$1,430,502,000
No. of issues	6
Debt	$1,430,502,000
No. of issues	6
Private placements	$108,121,000
No. of issues	2
Total financing for 1985	$1,538,623,000
Key underwriters	various

NEW YORK — The $5.6 billion cash acquisition of General Foods Corp. sent Philip Morris into the public markets five times in late 1985 to raise $1.35 billion.

The domestic and Euromarket financings were part of the company's efforts to refund floating rate General Foods debt with fixed-rate obligations.

To that end, it first dipped into the Euromarkets to raise $500 million in two deals — a 10-year offering of 10% notes and a four-year issue of 9.5% notes.

A week later, Philip Morris moved into the domestic arena to raise another $600 million through another two issues. One comprised three-year 9¼% notes and the other consisted of seven-year notes carrying a 10⅛% coupon.

The company continued its refunding efforts in mid-December, issuing $250 million of 10-year notes paying 9.7% in interest.

Philip Morris also completed an $80 million non-dollar deal in March to generate funds for general corporate purposes. The sterling-denominated deal was well received even though the overseas markets generally were experiencing a slump due to oversupply, volatile foreign exchange markets and an uncertain U.S. bond market. The coupon on the 10-year bonds was 11⅛%.

Philip Morris' private market activities consisted of two deals — a $6 million placement of senior notes in June and a $102 million placement of 5⅛%, seven-year notes denominated in Swiss francs.

Book-running managers on the company's Euronote and sterling deals were Union Bank of Switzerland and Lloyds Bank, respectively.

Goldman, Sachs & Co. and First Boston Corp. were lead underwriters on the U.S. public offerings. Continental Illinois acted as agent on the senior note private placement, while Union Bank was underwriter for the Swiss franc deal.

R.J. Reynolds Industries Inc.

Total public offerings	$1,421,193,000
No. of issues	9
Debt	$1,421,193,000
No. of issues	9
Private placements	$100,000,000
No. of issues	1
Total financing for 1985	$1,521,193,000
Key underwriters	Dillon, Morgan Guaranty, Union Bank of Switzerland, Nikko

WINSTON-SALEM, N.C. — The bulk of R.J. Reynolds Industries' financing activities last year stemmed from efforts to refinance some $2 billion in short-term debt incurred with the $4.9 billion acquisition of Nabisco Brands Inc.

Reynolds acquired Nabisco with about $2.5 billion in cash, plus preferred stock and notes.

Its ability to raise capital more cheaply overseas led the company to conduct most of its refinancing efforts overseas through four non-dollar debt issues and two Eurodollar deals.

About $422 million was raised through its swap-driven, non-dollar deals. Issues included an offering of 7¾% dual-currency Euroyen notes due in 1990; an offering of 8⅝% notes denominated in ECU and due in 1991; a 15-year Swiss franc issue carrying a 5⅜% coupon; an issue of 6⅞%, 15-year bonds denominated in deutsche marks.

Reynolds immediately swapped these foreign currency obligations for cheaper dollar-based debt. In the deutsche mark deal, for example, the company received dollar obligations at about 60 basis points above Treasuries, which was about 30 basis points less than what the company would have had to pay on comparable dollar debt.

Reynolds overseas refinancing efforts also included two Eurobond deals totaling about $250 million. The first was an offering of 10¼% bond due in 1993 and the second was a 10% note issue due in 1991.

Of Reynolds' three domestic deals during the year, only one — a $250 million offering in November of 30-year sinking fund bonds with an 11.35% coupon — was related to the Nabisco acquisition.

Its two other deals, in late July, raised just less than $500 million and included an eight- and 30-year issue carrying 10¾% and 11¾% coupons, respectively.

In the private market, Reynolds raised another $100 million with the placement of 10.9% notes due in 1995.

Dillon, Read & Co. acted as placement agent on the private transactio as well as manager of the company three public offerings in the Unite States. Lead underwriters for the va ous overseas deals included Nikk Securities, Union Bank of Switzerlan and Morgan Guaranty Trust Co.

Procter & Gamble Co.

Total public offerings	$853,937,0
No. of issues	
Debt	$853,937,0
No. of issues	
Private placements	
Total financing for 1985	$853,937,0
Key underwriters	Goldman, Morgan Stanl Daiwa

CINCINNATI — Procter & Gamb Co. turned to the U.S. and Euroma kets late last year to refinance sho term debt associated with its $1. billion cash acquisition of Richardso Vicks Inc.

The company raised more than $60 million in one domestic and two ove seas deals in November and Decem ber. The U.S. offering was a $300 m lion issue of 30-year, sinking-fun debentures priced at par to yie 10⅝%.

Overseas, Procter issued $150 m lion of seven-year senior notes th carried a 9⅞% coupon and wer priced at 101⅞%. That offering wa followed by another $150 million issu of 15-year, non-callable Eurobond which paid a 9⅝% interest rate an was priced at 100¼%. Net proceeds the two deals were $306 million.

Earlier in the year, Procter ha raised $248 million overseas for ge eral corporate purposes and to replac U.S. short-term commercial paper bo rowings.

It opened its financing activities f the year with an offering of Euroye notes — one of about 15 issuers that time to rush into the newly der gulated market to take advantage bargain-basement swap opportunitie The seven-year notes, whose ye

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based interest and principal was swapped into dollar-based obligations, carried a 6⅝% coupon and raised $98.4 million.

Several months later, the company issued $150 million of 10% Eurobonds due in 1995.

Goldman, Sachs & Co. was the lead manager for three of its dollar-denominated deals, while Morgan Stanley & Co. led underwriters on one. Daiwa Securities Co. was the lead on the Euroyen offering.

IBM Corp.

Total public offerings	$846,625,000
No. of issues	3
Debt	$846,625,090
No. of issues	3
Private placements	$0
Total financing for 1985	$846,625,000
Key underwriters	Salomon, Morgan Guaranty

STAMFORD, Conn. — IBM Corp.'s five public offerings for the year included a $100.8 million "sushi bond" offering aimed at attracting Japanese investors.

The issue of seven-year, dollar-based notes carried a 10¼% coupon and was priced almost 30 basis points below comparable Treasuries at the time of issuance in August. The deal was priced at 100¾ to yield 10.09%. But before IBM could offer the securities, the company had to sidestep regulations that limit the amount Japanese investors can own of securities issued by foreign entities to 10% of their portfolios.

To solve this problem, IBM used a subsidiary, IBM Japan, to offer the notes without the backing of a parent guarantee.

IBM, an infrequent issuer in the domestic markets under the parent's name, raised the bulk of its capital — about $745 million — in the United States in 1985. In July, it raised $497 million in an offering of 30-year debentures with a 10.5% coupon.

It entered the market again in October to issue $250 million of 10-year notes carrying a 10¼% interest rate and a seven-year call protection.

As that issue was being marketed, the Euromarket improved and prompted IBM, through IBM World Trade, to raise another $250 million with two issues of notes with the same interest, maturity and call features as the domestic deal. (Offerings by IBM World Trade, as well as IBM Credit Corp., were classified as financial company issues and as a result are not included in the numbers for the parent company.)

The $250 million domestic issue was priced at 99.65%, while the $150 million and $100 million offerings overseas were priced at 100¼% and 100.5%, respectively.

Overseas, the $150 million offering of notes was priced at 100¼%. Salomon Brothers Inc. led the domestic offerings, with Merrill Lynch Capital Markets and First Boston Corp. acting as co-managers. Morgan Guaranty Trust and Nomura Securities Co. were among the managers of the sushi bond deal.

Utilities

Pacific Telesis Group

Total public offerings	$1,146,243,000
No. of issues	4
Common stock	$353,175,000
No. of issues	1
Debt	$793,068,000
No. of issues	3
Private placements	$50,000,000
No. of issues	1
Total financing for 1985	$1,196,243,000
Key underwriters	various

SAN FRANCISCO — After selling 40-year and 39-year issues in 1985 and leading utilities in total public offerings for the year, Pacific Telesis Group raced back into the capital markets early this year, selling a 30-year debt issue.

The latest issue was done to refinance some higher coupon debt at lower costs, illustrating a key financing strategy for Pacific Telesis in 1986.

In February, its Pacific Bell unit offered $350 million of 9¼% 30-year debentures, priced at 98.45% to yield 9.4%.

John Hulse, Pacific Bell's vice chairman and chief financial officer, said the issue's proceeds will be "applied toward the redemption of our higher coupon issues (and) will save the company about $7.5 million in annual interest charges."

Pacific Bell used the new issue to finance the calling of its 40-year 16⅛% debentures, due 2021, and its 10-year 15% notes, due 1991.

Pacific Bell is posed for more public offerings this year; $150 million in debt was remaining in February in a 415 shelf registration.

In 1985, Pacific Telesis and Pacific Bell had together four public offerings of debt and equity and one private placement.

In September, Pacific Telesis sold 5 million shares of common stock at $70.63 each, receiving proceeds of $353 million.

Pacific Bell raised $50 million in a private placement of seven-year, 10.55% notes. Pacific Bell also raised $793 million in two domestic and one Eurodollar debt issue. In early April, it got $297.7 million from an offering of 12¾% 40-year debentures, priced at a 99.25% to yield 12.85%.

In August, it raised $375.3 million from an issue of 39-year 11⅜% debentures, priced at 98.8% to yield 11.5%.

Pacific Bell's Eurodollar offering was a seven-year 11¼% debenture issue, raising $100 million.

Pacific Bell's underwriting syndicates typically include as co-managers First Boston Corp., Goldman, Sachs & Co. and Salomon Brothers Inc. Morgan Stanley & Co. Inc. and Merrill Lynch Capital Markets joined the three as co-managers for two issues, including the common stock offering; and Kidder, Peabody & Co. Inc. and Shearson Lehman Brothers Inc. joined the three as co-managers in one issue.

Pacific Gas & Electric Co.

Total public offerings	$760,195,000
No. of issues	4
Debt	$760,195,000
No. of issues	4
Private placements	$0
Total financing for 1985	$760,195,000
Key underwriters	various

SAN FRANCISCO — Pacific Gas & Electric came out with a $400 million first mortgage bond deal in May that broke some records in the utility financing arena.

At the time of the offering, the deal was thought to be the largest single piece of public financing done by a utility as well as the largest utility financing to emerge to date in 1985.

Still, it met with strong investor demand partly due to a shortage of new long-term issues and utility paper.

Proceeds of the 12.25% bond issue due in 2018 were earmarked for capital expenditures and refunding two outstanding debt issues, including a 16% Eurobond issue. Morgan Stanley & Co., First Boston Corp. and Goldman, Sachs & Co. co-managed the deal.

Before year end, the utility also had completed two additional first and refunding mortgage bond deals — a $200 million issue of 11.25% bonds due in 2018 and a $100 million deal with a 10% coupon and a maturity date in 2019. First Boston and Goldman underwrote the $200 million offering, while Goldman and Salomon Brothers Inc. co-managed the $100 million deal.

Pacific Gas also dipped into the Euromarkets in September to complete a 150 million Swiss franc offering of 10-year bonds, which were swapped into dollar obligations. The deal carried a 5.25% coupon. Proceeds to the utility totaled $67.3 million. Credit Suisse First Boston was the lead underwriter.

On the equity side, the utility issued almost 5.5 million new common shares off the shelf throughout the year. The deals were not underwritten and therefore aren't part of the ranking universe. The price per share in the transactions averaged $19.14 for a total value of $104.7 million.

Southern California Edison Co.

Total public offerings	$747,472,000
No. of issues	5
Debt	$747,472,000
No. of issues	5
Private placements	$0
Total financing for 1985	$747,472,000
Key underwriters	various

ROSEMEAD, Calif. — Southern California Edison tapped the U.S. and overseas public markets five times last year, generating $747 million in net proceeds for refunding existing high-coupon debt, financing on-going construction expenditures and general corporate purposes.

The utility entered the Eurodollar markets in May to raise $100.3 million with 11% notes maturing June 1992 and in October to raise $100.7 million in a offering of 10.5% bonds maturing November 1993.

Southern California Edison's domestic financing activities consisted of three first and refunding mortgage bond offerings. In March, the company raised $224 million with 13% 30-year mortgage bonds. In late September, it came out with a 10% five-year issue, raising $124.5 million, and followed several days later with a 30-year deal carrying an 11.5% coupon, generating $198.2 million in net proceeds.

First Boston Corp., Salomon Brothers Inc. and Goldman, Sachs & Co., respectively, led underwriters on the mortgage-related issues. Credit Suisse First Boston and Daiwa Securities were lead managers on the overseas offerings.

GTE Corp.

Total public offerings	$718,611,000
No. of issues	10
Debt	$718,611,000
No. of issues	10
Private placements	$1,245,547,000
No. of issues	11
Total financing for 1985	$1,964,158,000
Key underwriters	various

STAMFORD, Conn. — GTE Corp.'s public financing program in 1985 focused on the redemption of high-coupon bonds and short-term debt reduction.

To this end, the company moved into the public markets 10 times last year to issue $718.6 million. Eight of those offerings were first mortgage obligations issued by GTE telephone subsidiaries in the Southeast, Southwest, California and Hawaii.

The $50 million to $74.5 million deals had maturities ranging from 10 to 30 years, while fixed-rate coupons ranged from 10⅛% to 11⅜%.

GTE Corp. itself ... short-term obligation in October with a $147.6 million offering of 10⅝% debentures due Oct. 1, 1995.

In the only GTE overseas public offering of the year, GTE Finance raised $76.6 million in a 150 million Swiss franc dual-currency transaction. The fully hedged, swap-driven offering carried a 7% coupon and a 15-year final maturity, although the bonds are puttable in 1997. The deal was done to raise lending capital for General Telephone companies.

In the private markets, GTE Corp. completed six private placements in 1985 for a total of $874 million. Three, totaling $590 million, were lease financings; two, totaling $90.7 million, were ownership interest deals; and one at $194 million was a private placement of secured loan certificates.

GTE Satellite Corp. arranged four private placements, raising almost $80 million through two first and collateralized trust mortgage bond transactions, $76.8 million in a lease financing and $167 million through the sale of secured loan certificates.

GTE Spacenet Corp. arranged a $48.2 million private placement of first and collateralized trust mortgage bonds during the year as well.

Lead underwriters for GTE's various public offerings included Merrill Lynch Capital Markets, Salomon Brothers Inc., Dean Witter Reynolds Inc., Shearson Lehman Brothers Inc., Morgan Stanley & Co. and First Boston Corp.

Placement agents for the private deals were Salomon, PaineWebber Inc., Bankers Trust Co. and Goldman, Sachs & Co.

Commonwealth Edison Co.

Total public offerings	$665,938,000
No. of issues	4
Common stock	$282,500,000
No. of issues	1
Preferred	$35,000,000
No. of issues	1
Debt	$348,438,000
No. of issues	2
Private placements	$35,000,000
No. of issues	1
Total financing for 1985	$700,938,000
Key underwriters	Merrill, Morgan Stanley, Goldman

CHICAGO — Commonwealth Edison raised almost $800 million in 1985 for construction and other corporate purposes.

The proceeds came from five domestic deals, four of which were public offerings.

The utility raised almost $283 million in February through issuing common stock. Another $348 million was raised in August in two first mortgage bond deals. In December, it issued preferred stock, netting $35 million in proceeds.

The mortgage bonds included a 10⅝% 10-year offering. Net proceeds totaled $99.4 million. The issue consisted of 11.75% 30-year first mortgage bonds, with net proceeds coming to $249 million.

Commonwealth tapped the private placement market only once with a $35 million issue of non-recourse notes.

Merrill Lynch Capital Markets lead managed the common stock deal, Morgan Stanley & Co. and Salomon Brothers Inc. co-managed the two mortgage bond deals and Goldman, Sachs & Co. was sole manager for the preferred offering. Continental Illinois National Bank & Trust Co. acted as agent on the private placement.

Service

SCI Holdings Inc.

Public offerings	$1,481,027,000
No. of issues	8
Preferred	$281,000,000
No. of issues	1
Debt	$1,200,027,000
No. of issues	7
Private placements	$0
Total financing for 1985	$1,481,027,000
Key underwriter	Drexel Burnham Lambert

NEW YORK — To help finance the leveraged buy-out of Storer Communications Inc., SCI Holdings and its Scip-

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issue of junk, or high-yield, securities in 1985, raising $1.2 billion debt and $261 million in preferred stock in concurrent offerings in November.

Kohlberg Kravis Roberts & Co. set up SCI to acquire Storer.

In a twist to the buy-out, Storer stockholders received, in addition to $91 in cash per share, a warrant to buy a share of SCI common stock for $4.72 if it goes public. In that event, 10% of SCI stock would be in public ownership. SCI's prospectuses gave no hint whether a public offering would occur. If there is none within 10 years, SCI will redeem the warrants at their appraised value.

Drexel Burnham Lambert underwrote the offerings.

In taking Storer private, KKR set up the highly leveraged financing, capitalizing it with only $227 million in common stock. KKR Associates, a KKR limited partnership, contributed $221 million, giving it 97.2% ownership of SCI. Meanwhile, 25 Storer executives, including Peter Storer, Storer's chairman and chief executive officer, contributed $6 million, giving them the other 2.8% of SCI. In the event of a public offering of SCI common stock, KKR investors and Storer management would still own 90% of SCI.

In the November offerings, SCI raised $600 million in an issue of 15% 12-year senior subordinated debentures and another $600 million in six issues of zero-coupon notes, with interest rates from 13% to 14¼% and maturities from five to 10 years.

In addition, Scipsco sold $261 million in $35-a-share cumulative redeemable exchangeable preferred stock, paying an annual dividend of $5.60.

Besides the public offerings, SCI borrowed $740 million under a bank credit agreement, $50 million under a working capital facility and $5 million from the sale of other warrants to SCI Equity Associates L.P., a limited partnership of SCI Partners L.P., also a KKR limited partnership.

Unlike the warrants issued to Storer's stockholders, the warrants bought by SCI Equity Associates aren't tied to a public offering of SCI stock. The warrants bought by SCI Equity entitle the limited partnership to buy 67.8 million shares of SCI common stock at $2.05 anytime in the next 15 years.

SCI likely will return to the capital markets sometime in the next few years to try to refinance the buy-out, the prospectuses state. SCI doubts anticipated cash flow from Storer's seven television station and 105 cable TV systems will be enough to make all the principal payments on the debt securities, commencing in 1991, and the scheduled redemption of preferred stock, beginning in 1997.

As a result, Storer has so far announced intention to sell one of its cable systems to help repay indebtedness.

Phibro-Salomon Inc.

Total public offerings	$699,335,000
No. of issues	4
Common stock	$415,000,000
No. of issues	1
Debt	$284,335,000
No. of issues	3
Private placements	$0
Total financing for 1985	$699,335,000
Key underwriter	Salomon Brothers

NEW YORK — Phibro-Salomon's $415 million secondary stock offering in June counted as one of the largest common stock deals of the year.

The 10 million shares were sold at $41.50 a share by the Mineral and Resources Corp., Hamilton, Bermuda, in an effort to restructure its investment portfolio and reduce its dependency on Phibro-Salomon stock. The offering reduced Minorco's position in the stock to 14.5% from 21.3%.

Phibro-Salomon also was among a second wave of U.S. issuers to enter the Euroyen market. In August, it issued 10-year, dual-currency Euroyen bonds with an 8% coupon payable in yen and the principal redeemable in dollars at an exchange rate of 208 yen to the dollar.

The obligations, like those issued by into dollar-based obligations. At the time, the swap-related transactions were saving issuers anywhere from 20 to 45 basis points on financing costs against comparable domestic debt securities. Net proceeds to Phibro-Salomon totaled almost $85 million.

Phibro-Salomon also came out with two other domestic debt offerings in August. It raised $100 million with an offering of 10.7%, seven year notes and $99.4 million with an offering of 11⅝% 30-year sinking fund debentures.

Salomon Brothers Inc. and Nomura International Ltd. were managers of the Euroyen deal. Salomon also led the other offerings, with co-managers including Lazard Freres & Co., Merrill Lynch Capital Markets, Prudential-Bache Securities Inc. and Shearson Lehman Brothers Inc.

McDonald's Corp.

Total public offerings	$536,013,000
No. of issues	6
Debt	$536,013,000
No. of issues	6
Private placements	$0
Total financing for 1985	$536,013,000
Key underwriters	various

OAK BROOK, Ill. — McDonald's Corp. turned more frequently to the overseas than the U.S. markets for cheaper financing last year.

Of the $536 million it raised through public debt offerings in 1985, $337 million came from Euromarket deals.

It entered the Eurcyen arena twice, raising almost $98 million in January and $88.6 million in September. The first was a straight yen-denominated offering of 6.5% seven-year debt, the second a 10-year dual currency offering of bonds with an 8% coupon payable in yen and principal payable in dollars.

McDonald's raised another $47 million in March offering of 10⅞% five-year notes denominated in sterling. It also raised $103 million through the issuance of 10% Eurodollar notes maturing January 1993.

The company came out with two domestic offerings during the second half of 1985 — one 10-year deal, with an 11⅝% coupon, and one 30-year offering of sinking fund debentures, with a 10⅞% coupon. Proceeds of the deals were about $100 million each.

McDonald's has been using proceeds from its 1985 financings to pay for restaurant expansion. Daiwa Securities Co. was lead manager for the two yen deals; Salomon Brothers Inc. led managers on the sterling offering and Morgan Stanley & Co. led for the Eurodollar offering. The company tapped PaineWebber Inc. as lead underwriter for its domestic offerings. Co-managers on its various deals included Morgan Guaranty Trust Co., Kleinwort, Benson Ltd. and Merrill Lynch Capital Markets.

Capital Cities Communications Inc.

Total public offerings	$497,800,000
No. of issues	2
Debt	$497,800,000
No. of issues	2
Private placements	$375,000,000
No. of issues	1
Total financing for 1985	$872,800,000
Key underwriter	Goldman, Sachs

NEW YORK — Capital Cities Communications' 1985 financing activity was related solely to its merger with the American Broadcasting Companies Inc. In August, it raised $499 million through two public debt offerings — an 11⅝% 30-year sinking fund issue, raising $299 million, and a 10.5% 12-year note offering, raising $199 million.

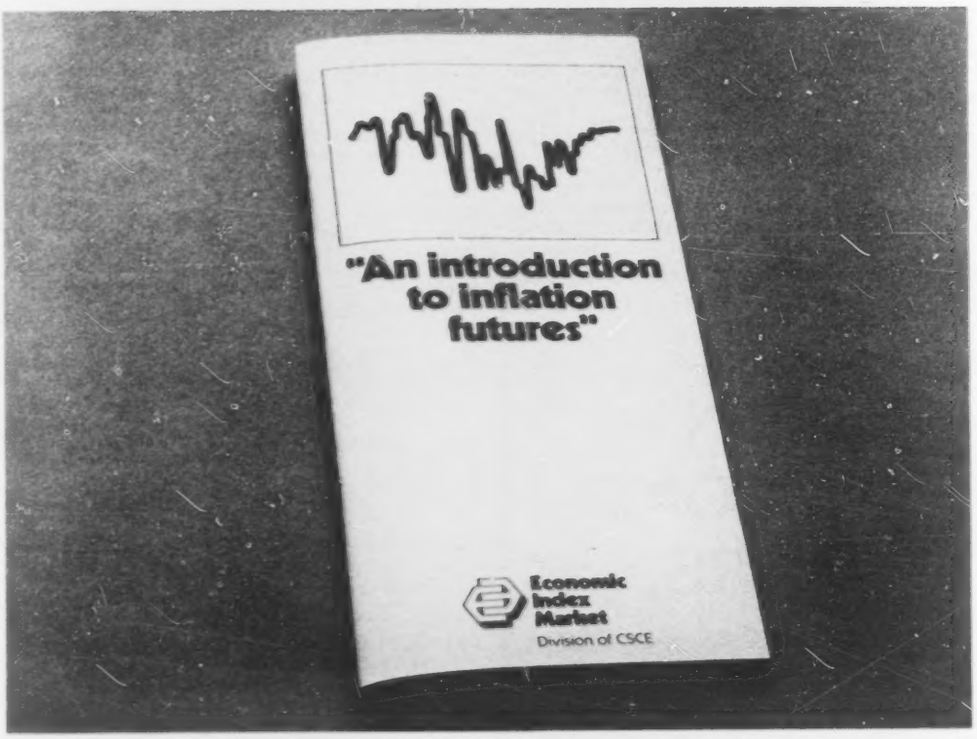
At year end, Capital Cities arranged another $375 million in financing through the private placement of 10-year senior notes.

All were domestic deals. Goldman, Sachs & Co. was the lead manager on the two public offerings, with Morgan Stanley & Co. and Salomon Brothers Inc. acting as co-managers. First Boston Corp. acted as agent in the private placement.

Wickes Cos.

Total public offerings	$475,159,000
No. of issues	3
Preferred	$175,000,000
No. of issues	1
Debt	$300,159,000

Inflation Insurance



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No. of issues	2
Private placements	$450,000,000
No. of issues	3
Total financing for 1985	$925,159,000
Key underwriter	Drexel Burnham Lambert

SANTA MONICA, Calif. — Wickes Cos. raised $925 million last year to finance its acquisition of Gulf & Western Industries Inc.'s consumer and industrial products group. Valued at almost $950 million, the acquisition was made for cash and a five-year option to buy 10 million Wickes shares at $6 a share.

Prior to the deal's announcement, the company had raised $175 million through convertible exchangeable preferred stock, $257.4 million through 10-year subordinated notes and $12.8 million through 12-year usable debentures in the public markets.

The preferred, which sold at $25 a share, carries a $2.50 annual dividend and each $4.06 of preferred is convertible into Wickes common. The interest rate on the subordinated debt was set at 15%, while the usable debentures, which could be used at face value to exercise outstanding Wickes warrants, carried an 11⅜% coupon.

To expedite the remainder of the financing needed for its acquisition, Wickes arranged a private placement with the right to publicly register the securities later. It included $400 million of preferred stock, priced at $25 a share and carrying a $3 initial dividend.

Another $50 million was raised through two seven-year issues — $25 million of straight 13⅞% notes and $25 million of increasing rate notes with an initial coupon of 11.5%.

Wickes' financing activity came less than a year after emerging from bankruptcy proceedings.

Natural resource

Atlantic Richfield Co.

Total public offerings	$2,042,025,000
No. of issues	7
Debt	$2,042,025,000
No. of issues	7
Private placements	$0
Total financing for 1985	$2,042,025,000
Key underwriter	Salomon

LOS ANGELES — Atlantic Richfield, the leading issuer among natural resource companies in 1985, burst back into the capital markets early this year, selling $1.2 billion in five different debt offerings as part of a massive restructuring of its balance sheet.

Excluding the 1986 offerings, Arco last year nearly halved its shareholder equity, while almost doubling its long-term debt.

Ronald Arnault, senior vice president-financial planning and chief financial officer, said recently the increase in shareholder returns was worth the small additional cost of leveraging its balance sheet, including a credit-rating downgrade by Moody's Investors Service Inc. to A 2 from Aa 3.

In December, before the downgrade, he said Arco offered seven-year, 9½% notes, raising $149.5 million and selling them at 53 basis points over comparable Treasury securities. After the downgrade, he said Arco sold another issue of seven-year notes at a 79-basis-point spread.

Including the December issue, Arco last year sold seven offerings, all debt and all priced just a fraction under par.

Its first public offering of 1985 was its longest-maturing issue, 30-year debentures sold in June. Arco raised $298.8 million selling the 11⅛% coupon bonds.

Later that month, it sold its only nondomestic offering, raising $249.3 million in 15-year 10¼% coupon Eurodollar bonds. Notably Arco and Ford Motor Co. were the only two U.S. issuers to re-enter the Eurodollar market in June after American firms had stayed away for several months.

In July, it sold its biggest offering, raising nearly $1 billion in a two-tranche deal. It raised $498.9 million in 10-year 10⅜% coupon notes; and $496.5 million in 10⅞% coupon 20-year debentures.

In October, it received $199.5 million, selling 9¾% coupon four-year notes. The same month, it raised $148.8 million, offering 10-year 10½% coupon notes.

So far this year, Arco has had five debt offerings, totaling $1.2 billion.

Arco's balance sheet shows some results of the huge restructuring. At the end of 1985, Arco's balance sheet had $5.7 billion in long-term debt, $332 million in capitalized leases, $69 million in other long-term obligations and $5.5 billion in shareholder equity.

By contrast, the year before, Arco had $3.4 billion in long-term debt, $356 million in capitalized leases, $926 million in other long-term obligations, $9.9 billion in shareholder equity and $38 million in preferred stock.

While increasing leverage, Arco also raised its dividend by a third, to $4 a share annually. Because the increase wasn't announced until the second quarter and because of stock repurchases, total dividend payments increased slightly, to $766 million in 1985 from $742 million in 1984.

Arco suspended its stock repurchase program early this year. But a spokesman noted Arco completed 85% of the $4 billion repurchase announced in April 1985.

Texaco Inc.

Total public offerings	$1,098,421,000
No. of issues	4
Debt	$1,098,421,000
No. of issues	4
Private placements	$0
Total financing for 1985	$1,098,421,000
Key underwriters	various

WHITE PLAINS, N.Y. — Texaco Inc. raised $1.1 billion for working capital, retirement of existing debt and general corporate purposes last year with proceeds from four deals issued by its subsidiary, Texaco Capital.

Almost $800 million of its financing efforts represented three deals done in the Euromarkets. Texaco issued $250 million of 10-year guaranteed notes with an 11⅛% coupon in April and another $296 million of 10-year bonds paying 10% interest in July.

It entered the Eurodollar market a third time in August to raise $253 million of five-year notes, also with a 10% coupon.

Texaco's only domestic deal for the year was a $300 million extendable note offering with a 15-year final maturity and an initial coupon of 11¼%. The rate will be reset in March 1989, at which time investors have the right to put the bonds back to the company.

Salomon Brothers Inc. was the lead underwriter on the extendable deal, with Merrill Lynch Capital Markets and Morgan Stanley & Co. co-managing the deal. Union Bank of Switzerland led the $250 million Euronote offering, Credit Suisse First Boston was lead manager on the $296 million Eurobond deal. Other managers of these deals included Bankers Trust Co., Commerzbank and Nomura Securities.

Goldman, Sachs & Co. and Union Bank managed the $253 million Euronote deal.

Chevron Corp.

Total public offerings	$798,728,000
No. of issues	2
Debt	$798,728,000
No. of issues	2
Private placements	$250,000,000
No. of issues	1
Total financing for 1985	$1,048,728,000
Key underwriters	Salomon, Merrill, Dillon

SAN FRANCISCO — Chevron Corp. raised more than $1 billion in the public and private placement markets in 1985 to help refinance existing debt, fund capital expenditures and provide financing for general corporate purposes.

Through Chevron Capital U.S.A., it entered the U.S. public markets twice, first in January to raise $500 million and again in May to raise $223 million. Both deals were guaranteed note offerings. However, the first issue carried an 11% coupon and five-year maturity, while the second was an offering of 10.75% 10-year securities.

In addition, the oil company arranged a $250 million private placement of promissory notes due in February 1990. Dillon, Read & Co. acted as agent on the deal.

Meanwhile, Salomon Brothers Inc. was the sole underwriter on Chevron's January public offering. Salomon and Merrill Lynch Capital Markets were co-managers on the May note offering.

Tenneco Inc.

Total public offerings	$595,650,000
No. of issues	5
Debt	$595,650,000
No. of issues	5
Private placements	$0
Total financing for 1985	$595,650,000
Key underwriters	Morgan Stanley, Merrill

HOUSTON — Tenneco eschewed the domestic markets in 1985, choosing instead to raise almost $596 million for general corporate purposes overseas.

Four of its five deals last year were Eurodollar financings and included a $150 million offering of four-year notes, a $150.4 million issue of extendable notes with a 10-year final maturity and two $100 million offerings guaranteed notes due in 1989 and 1995. Interest rates ranged from 10¾% for the extendables, whose first put is exercisable in 1990, to 11.5% for the four-year notes.

Tenneco turned to the non-dollar markets for its final deal of the year. In late December, it came out with a 10-year bond deal denominated in deutsche marks. The coupon on the swap-driven transaction was set at 6⅞%. Net proceeds totaled $94.8 million.

Commerzbank was the underwriter on the German currency issue. Morgan Stanley & Co. and Merrill Lynch Capital Markets co-managed the four Eurodollar transactions.

Mobil Corp.

Total public offerings	$422,650,000
No. of issues	4
Debt	$422,650,000
No. of issues	4
Private placements	$400,000,000
No. of issues	1
Total financing for 1985	$822,650,000
Key underwriters	Morgan Stanley, Union Bank of Switzerland, Societe Generale

NEW YORK — Mobil Corp. raised almost $423 million for general corporate purposes in the public markets in 1985, all but $100 million of which represented foreign offerings.

The oil company started the year with a $200 million offering of five-year Euronotes in late January. The securities carried a 10¼% coupon.

In August, when domestic financing volume was off from July, the issuer came out with two swap-driven, non-dollar deals totaling $123 million. The first, a seven-year dual-currency issue with the 7% coupon payable in Swiss francs and principal payable in dollars, raised just more than $61 million for Mobil. The second was a French franc issue of five-year, 11⅛% notes that generated $59 million.

In its only domestic public offering of the year, Mobil raised $99.6 million through the sale of three-year notes carrying an 8¾% coupon.

In addition, Mobil came out with one private placement during the year — a $400 million note offering due in 1986.

Union Bank of Switzerland led underwriters in Mobil's Euronote and dual-currency issues. Societe Generale was the lead manager role on the French franc deal, while Morgan Stanley & Co. lead managed the company's domestic public offering. First Boston Corp. acted as placement agent in the private transaction.

Retail

Pantry Pride Inc.

Public offerings	$697,540,000
No. of issues	4
Preferred	$125,000,000
No. of issues	1
Debt	$542,540,000
No. of issues	3
Private placements	$725,000,000
No. of issues	2
Total financing for 1985	$1,422,540,000
Key underwriter	Drexel Burnham Lambert

NEW YORK — In a sort of raspberry-sounding swan song to retailing, Pantry Pride led all retail companies in public offerings in 1985, only to use the proceeds as part of a massive restructuring to abandon its retail operations.

It raised $1.4 billion in public offerings and private placements to acquire Revlon Inc. and help transform itself into a cosmetics manufacturer.

Pantry Pride raised even more money after it bought Revlon last fall and began liquidating many of the cosmetics firm's assets. The liquidations raised about $1.9 billion — almost as much as the $2 billion Pantry Pride paid for Revlon — while keeping intact Revlon's cosmetics operations and two health-related units.

In the next few weeks, Pantry Pride plans to change its name to Revlon Group Inc., signaling its concentration on cosmetics, said a spokesman who recounted the financings and restructuring.

The takeover and restructuring started in June 1985 when MacAndrews & Forbes Group, a New York-based closely held firm, took control of Pantry Pride by buying 35% of its stock. Pantry Pride, under new management, then positioned itself for its takeover of Revlon.

In three simultaneous public offerings in July, Pantry Pride raised a total of $542.5 million in junk debentures and notes.

At the same time, it raised another $125 million from a sale of exchangeable preferred stock. All four offerings of junk, or high-yield low-rated, securities were sold domestically and underwritten by Drexel Burnham Lambert Inc.

In August, Pantry Pride withdrew another public offering of junk bonds and instead raised in November the $725 million from private placements of two floating-rate notes, consisting of $500 million in five-year senior subordinated notes and $225 million in six-year subordinated notes. Drexel served as the agent.

The private investors then turned around, registered the debt and sold it in the public markets. Drexel again was the underwriter.

In December, Pantry Pride sold Revlon's Norcliff Thayer drug unit for $395 million to Beecham Group, London. A month later, it sold another Revlon pharmaceutical unit, USV/Armour Inc., for $690 million to Rorer Group Inc. The asset sales, coupled with Pantry Pride's capture of $400 million cash Revlon had on hand and a $50 million reversion from the termination of Revlon's pension plan, nearly equals the price of the acquisition.

In addition, Pantry Pride is receiving an undisclosed amount of cash from abandoning its own retail operations. Pantry Pride sold the bulk of its supermarkets in 1985 and this year plans to sell the rest of its retailing operations, Adams Drug Co. and Devon Stores Inc. The spokesman said Pantry Pride hasn't disclosed the proceeds from the retail operations sales.

Pantry Pride is retaining the use of some $400 million in net operating tax loss carryforwards, received as a result of the emergence of its predecessor, Food Fair Inc., from bankruptcy law proceedings several years ago. The spokesman said the soon-to-be Revlon Group Inc. will use the carryforwards to reduce income taxes of future earnings.

He said the company hasn't any plans to further public or private offerings this year.

As of Dec. 31, Pantry Pride had $200 million in equity and $2.64 billion in total debt, consisting of $1.64 billion from Pantry Pride and $1 billion from Revlon, the spokesman said.

K mart Corp.

Total public offerings	$498,118,000
No. of issues	3
Debt	$498,118,000
No. of issues	3
Private placements	$0
Total financing for 1985	$498,118,000
Key underwriters	Goldman, First Boston, Salomon, Drexel

TROY, Mich. — K mart Corp. went on a fund-raising blitz in early 1985, coming out with three competitively bid debt issues in as many weeks.

The last week in February, the retailer issued $250 million of 12.75% 30-year sinking-fund debentures through Goldman, Sachs & Co., First Boston Corp. and Salomon Brothers Inc.

It followed the next week with $150 million of 12⅛% notes maturing in 1995; Drexel Burnham Lambert un-

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derwrote the deal. The company wrapped up the financing drive a week later with a $100 million offering of 20-year debentures carrying a 12.5% coupon. Goldman and First Boston managed that deal.

All three deals had difficulty selling, primarily because of poor market conditions at the time. In addition, the 10-year note offering's problems were said to be compounded by the issue's aggressive pricing and a competing deal by a similar credit that offered a more lucrative yield.

The three debt offerings exhausted a $500 million shelf registration filed by K mart shortly before it went into the market. The $498 million the company received in net proceeds were earmarked for general corporate purposes.

Petrie Stores Corp.

Total public offerings	$373,500,000
No. of issues	3
Common stock	$98,500,000
No. of issues	1
Debt	$275,000,000
No. of issues	2
Private placements	$0
Total financing for 1985	$373,500,000
Key underwriters	Goldman, Sachs

SECAUCUS, N.J. — Petrie Stores Corp. took advantage of the strong stock market at year end to put additional equity on its books.

The retailer raised $98.5 million in mid-December through a 2 million common stock offering managed by Goldman, Sachs & Co. The shares were priced at $49.25 each.

Petrie had already entered the debt markets earlier in the year to raise $275 million, also through Goldman. In late March, it netted $150 million with an offering of subordinated exchangeable debentures. In August, it raised another $125 million through an issue of convertible subordinated debentures. Both issues mature in 2010. The exchangeable offering carried an interest rate of 7.5%, while the convertible issue's coupon was 8%.

J.C. Penney Co.

Total public offerings	$351,284,000
No. of issues	3
Debt	$351,284,000
No. of issues	3
Private placements	$0
Total financing for 1985	$351,284,000
Key underwriters	First Boston, Nikko

NEW YORK — J.C. Penney was one of some 15 issuers to take advantage of the bargain basement swaps being offered U.S. issuers of Euroyen notes in January 1985.

Nikko Securities Co. International led underwriters in a J.C. Penney offering of seven-year, yen-denominated Euronotes with a 6.75% coupon. Proceeds to the company totaled $102.3 million.

The Japanese Ministry of Finance had opened the Euroyen market up to highly rated U.S. issuers only the month before. To get the market rolling, Japanese financial institutions arranged currency and interest rate swaps with issuers of aggressively priced dollar-based obligations.

As a result, many U.S. Euroyen issuers got dollar-based obligations that were more than 25 basis points cheaper than other comparable dollar transactions.

J.C. Penney also raised about $250 million in two domestic deals underwritten by First Boston Corp. It netted $149 million with an issue of 30-year, fixed-rate sinking fund obligations in June. Another $100 million came from a December offering of 10-year, fixed-rate notes. Coupons on the two deals were 11% and 9.75%, respectively.

The transactions were done to support customer receivables and financing capital expenditures associated with updating J.C. Penney stores.

Dayton-Hudson Corp.

Total public offerings	$299,750,000
No. of issues	3
Debt	$299,750,000
No. of issues	3
Private placements	$0
Total financing for 1985	$299,750,000
Key underwriter	Goldman, Sachs

to finance an on-going expansion program last year.

Domestically, it focused in the long end of the maturity spectrum with two offerings of 30-year, fixed-rate bonds. The company's first offering of sinking fund debentures in spring, managed by Goldman, Sachs & Co., carried a 12% fixed interest rate. Rates had declined by late fall, enabling the company to garner an 11.25% coupon on its second 30-year deal, which was co-managed by Goldman and Salomon Brothers Inc. Both issues netted Dayton-Hudson $100 million.

Dayton-Hudson also went overseas to raise almost $100 million through a Eurodollar offering. The 10-year notes were issued with a 10⅝% coupon. Goldman and Credit Suisse First Boston co-managed the issue.

The 50 largest issuers profiles were written by staff members Marci Baker and Barry B. Burr with help from Lauren Picker.

Transportation

People Express Airlines Inc.

Total public offerings	$373,100,000
No. of issues	6
Common stock	$23,250,000
No. of issues	1
Preferred	$30,000,000
No. of issues	1
Debt	$319,850,000
No. of issues	4
Private placements	$4,366,000
No. of issues	1
Total financing for 1985	$377,466,000
Key underwriters	Morgan Stanley, Hambrecht

NEWARK, N.J. — People Express Airlines Inc., already highly leveraged, added in 1985 $324 million of debt, including $97 million to help buy Frontier Airlines, and closed the year with a net $27 million loss.

In April, to try to strengthen its equity base and enhance its ability to finance operations and capital expenditures, People Express raised $30 million, selling 1.2 million shares of 10% convertible cumulative preferred stock. The stock carried a 15.9% conversion premium, making it convertible into common stock at $10 a share.

Robert McAdoo, chief financial officer, said the offering was the only way to build capital without diluting equity.

In June, it raised a total of $124.7 million in two issues of secured equipment trust certificates, using some of the proceeds to repay bank debt incurred to buy aircraft. The balance went for working capital and unspecified corporate purposes.

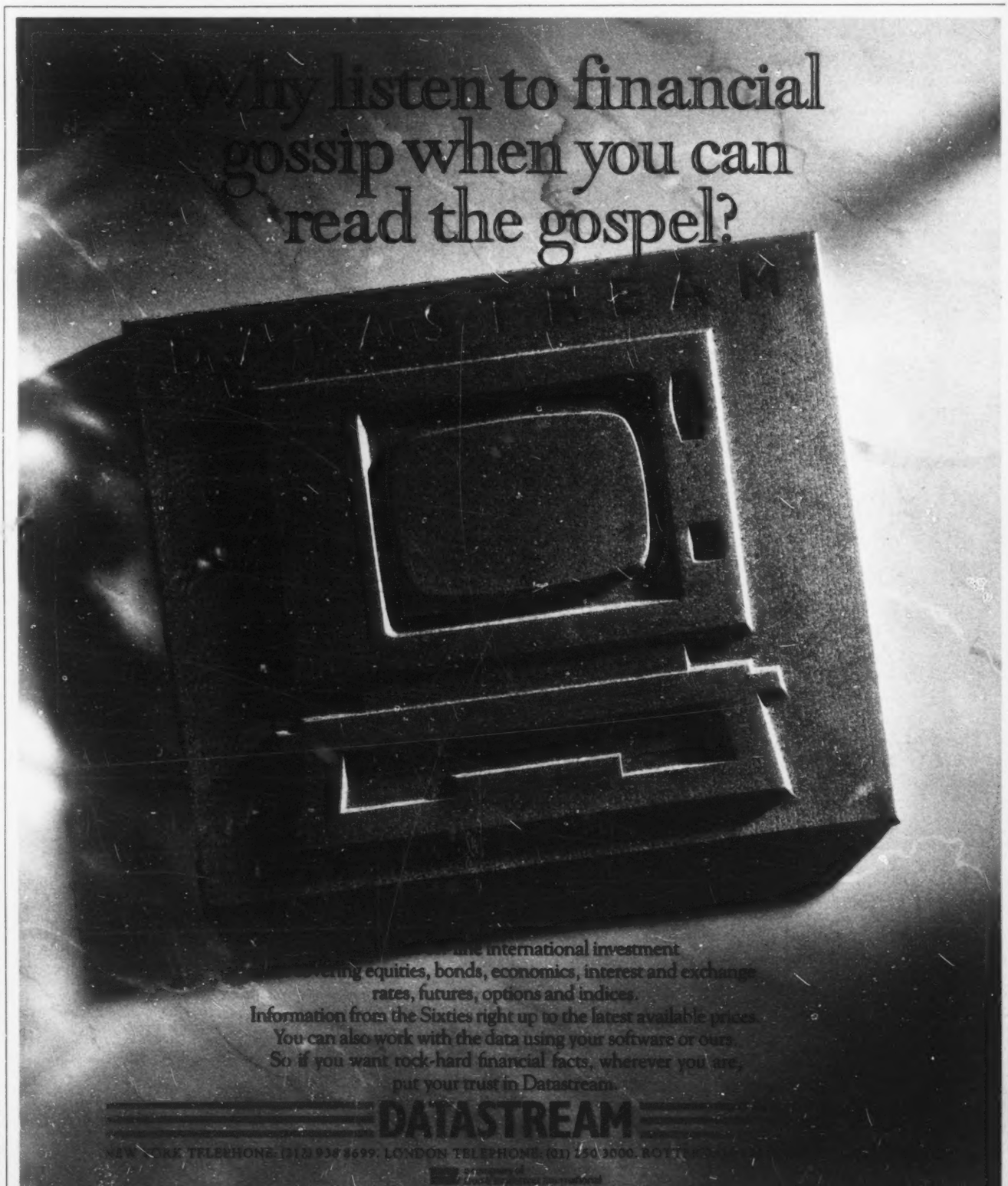
Once more to strengthen its equity base, People Express in September sold 2 million shares of common stock at $11.58 a share, raising $23.2 million.

In its most unusual offering, People Express sold $125 million in joint extendible term securities having put and call options. It used $97 million of the proceeds to pay for its $300 million purchase of Frontier Holdings Inc., parent of Frontier Airlines. People Express needed to come up with only about a third of the price, because the Denver-based Frontier had accumulated some $200 million as part of its plan to take itself private for $17 a share. People Express' contribution brought the price to $24 a share.

The notes have a 14⅜% coupon and a 10-year maturity. After five years, investors can either put the notes back to People Express at par, or they can buy at par an equivalent amount of five-year notes with the same coupon to double their holdings.

Byron Rose, managing director, Morgan Stanley & Co., which jointly underwrote the JETS offering with Hambrecht & Quist, said the deal will look good for People Express so long as interest rates rise no more than 325 basis points or fall no more than 150 basis points during the 10 years.

In its only foreign offering, People Express raised the eqivalent of $70.1 million by selling a 150 million Swiss franc 5½% convertible bond issue. The bonds carried a conversion premium of 26.5%; People Express stock



was then selling at $8.50 a share. People Express noted it has income in Belgium francs, which track the Swiss currency. Paribas was the lead manager.

In its only private placement, People Express sold $4.3 million in 10½%, four-year guaranteed bonds. E.F. Hutton was its agent.

Minstar Inc.

Public offerings	$298,812,000
No. of issues	1
Debt	$298,812,000
No. of issues	1
Private placements	$84,000,000
No. of issues	1
Total financing for 1985	$382,812,000
Key underwriter	Drexel Burnham Lambert

MINNEAPOLIS — Minstar Inc., a highly leveraged diversified firm controlled by Irwin L. Jacobs and noted for its acquisitions, last year had three different financings of registered debt and equity securities, although only one public offering.

In April, it raised $298.8 million by selling 14⅞% senior subordinated 10-year notes, priced at 99.6% and underwritten by Drexel Burnham Lambert Inc.

Richard E. Karkow, senior vice president-finance, said the offering was made for possible acquisitions. "As it turned out, they were used largely to buy AMF" for $525 million in October, he said. For the AMF Inc. stock, Minstar paid $342 million in cash and exchanged $203 million in 10% senior subordinated 10-year notes.

The single public offering of the 14⅞% notes was enough to make Minstar the second leading issuer among transportation companies. Mr. Karkow takes issue with the classification of Minstar as a transportation firm, because its sole such unit, Bekins Co., accounts for only about a quarter of its revenue.

In June, Minstar raised $84 million in a private placement by selling 4 million shares of common stock for $21 each to its directors and large shareholders. Minstar now has about 17.5 million shares outstanding. Mr. Karkow said the placement was done to get more equity in the company and to allow investors with already substantial interests to increase their stake. No investment banker was used in the transaction.

In February, Minstar bid about $760 million to buy Pioneer Corp., Amarillo, Texas. But T. Boone Pickens' Mesa Energy Partnerships put in a counter bid for Pioneer.

Regardless of the outcome, Mr. Karkow noted in Minstar's policy, financing doesn't have to follow a deal. As in the sale of the notes in April, Minstar can build a cash store before making any bid.

Mr. Karkow said Minstar had no plans to raise its credit standing out of the junk bond, or below investment-grade rating, although he said it might reduce its debt. As of Dec. 31, it had $731 million in long-term debt and $237 million in equity.

Texas Air Corp.

Total public offerings	$287,813,000
No. of issues	5
Common stock	$47,813,000
No. of issues	1
Debt	$240,000,000
No. of issues	4
Private placements	$14,300,000
No. of issues	1
Total financing for 1985	$302,113,000
Key underwriters	Drexel, Kidder, Peabody

HOUSTON — Texas Air Corp. raised more than $300 million in 1985 primarily through the public debt markets.

The airline, which has followed its failed attempt last year to take over TWA with a successful bid to acquire Eastern Air Lines, opened the year with a two-pronged offering of senior notes and subordinated exchangeable debentures.

The $60 million offering of seven-year notes in late January carried a 15¾% interest rate. Investor interest in the notes prompted the company to increase the offering by $10 million.

The second part of the financing, a $30 million issue of 20-year exchangeable debt, came a week later and was priced at par to yield 10%. The securities were structured to be exchangeable into Continental Airlines common stock at $12 per share, for a 23% conversion premium over Continental stock's trading price at the time of issue.

Proceeds from the issues were earmarked for general corporate purposes and for the purchase of aircraft and other airline-related assets.

Texas Air returned to the debt markets later in the year to offer $75 million each of five and 10-year senior notes. Both issues were priced at par to yield 14⅜% for the five-year notes and 14.9% for the longer term securities.

The issuer also moved into the equity markets once last year to raise $48 million with the sale of 2.5 million shares of common stock at 19⅛ per share.

Its only private placement in 1985 was a $14.3 million deal of 15-year certificates placed through Merrill Lynch Capital Markets.

Kidder, Peabody & Co. was the lead manager for Texas Air's first two debt offerings, with Merrill and Smith Barney, Harris Upham & Co. Inc. co-managing those deals. Drexel Burnham Lambert Inc. was sole manager for the second two senior note issues. Kidder, Drexel and Smith Barney were managers on the stock offering.

Federal Express Corp.

Total public offerings	$212,000,000
No. of issues	2
Common stock	$112,500,000
No. of issues	1
Debt	$99,500,000
No. of issues	1
Private placements	$202,916,000
No. of issues	6
Total financing for 1985	$414,916,000
Key underwriter	Kidder, Peabody

MEMPHIS, Tenn. — Federal Express Corp. completed 10 public and private transactions in 1985 in its efforts to finance capital expenditures related to aircraft facilities and equipment.

The $212 million in proceeds from its two public offerings in the interim was used to retire outstanding commercial paper.

In August, the company raised $99.5 million through a 10⅝% 10-year senior note offering priced at 99.5 to yield about 10.7%.

In mid-December, it moved into the equity markets to issue 2 million shares of common at $56.25 apiece for a total offering size of $112.5 million.

Kidder, Peabody & Co. lead managed both deals, with Merrill Lynch Capital Markets acting as co-manager on the stock deal.

Federal Express also raised almost $203 million in the private placement arena through six transactions, including a leveraged lease, an ownership interest sale and four note offerings. Private deal sizes ranged from $12.4 million for the ownership interest transaction to $74.3 million for the private placement of 9.75% notes due in 1995 to 1997.

Merrill Lynch Capital Markets was used most frequently as placement agent in the private deals.

AMR Corp.

Total public offerings	$200,625,000
No. of issues	1
Common stock	$200,625,000
No. of issues	1
Private placements	$0
Total financing for 1985	$200,625,000
Key underwriters	Salomon, Morgan Stanley

DALLAS/FORT WORTH — AMR Corp. added to an already strong balance sheet and cash position with its mon stock — American Airlines' only financing for the year.

Underwritten by Salomon Brothers Inc. and Morgan Stanley & Co., the deal was priced at $40⅛ a share for a total of $200.6 million. Proceeds went directly into the corporate coffers and is now being invested on a short-term basis.

In addition to strengthening AMR's balance sheet, the stock offering was also designed to strengthen the airline's A rating. In previous years, AMR had held a Baa rating.

Health

American Medical International Inc.

Total public offerings	$505,137,000
No. of issues	6
Common stock	$119,025,000
No. of issues	1
Debt	$386,012,000
No. of issues	5
Private placements	$0
Total financing for 1985	$505,137,000
Key underwriter	Goldman, Sachs

BEVERLY HILLS, Calif. — To finance an aggressive acquisition and capital spending program last year, American Medical International raised $505.1 million in an equity offering and a variety of debt issues, both in U.S. dollar- and foreign currency-denominated issues, including 30-year fixed-rate debentures.

"The hospital industry is very capital intensive," said Anthony Dent, vice president, director-investor relations.

For 1986, Mr. Dent said, "We are looking at a moderation of capital spending and acquisitions, simply because we've been so active in (these areas)."

Even so, American Medical this year has raised $318 million in four offerings in the United States and abroad. Mr. Dent noted it still has $100 million debt remaining in a 415 shelf registration.

"We are not hesitant about using new capital markets or new securities," Mr. Dent said. In February, it raised about $44 million from a $50 million offering of British bulldog debentures — pound sterling notes issued by a foreign firm for use outside the United Kingdom. The 9⅞% coupon debt was priced at 88.255%.

In 1985, it began its financing in January, raising $45.7 million in 10-year 11¼% in Eurosterling notes. Later that month, it raised $99.2 million in 10-year 11⅜% notes in a U.S. offering.

In May, it got $41.6 million selling a 12-year dual-currency bond in the Swiss market. A month later, it came to the U.S. market three times more. It raised $99.5 million in 10-year 10¼% notes and $99.8 million in 30-year 11¼% debentures that both sold at less than one percentage point under par.

Mr. Dent said Goldman, Sachs & Co. was lead manager of all American Medical's domestic debt and equity offerings. Dean Witter Reynolds Inc. was a key underwriter for all three debt issues and Salomon Brothers Inc., underwrote two debt issues.

Barclays, London, managed the Eurosterling offering and Soditic, a Swiss firm, managed the dual-currency offering, with Goldman, Sachs serving as key underwriter.

This year its other offerings were a $75 million 9.175% Eurodollar issue, priced at 1% above par and two U.S.-dollar notes of $100 million each, a 9¾% seven-year issue and a 9⅝% five-year issue, both sold domestically at a fraction below par.

Maxicare Health Plans Inc.

Total public offerings	$440,799,000
No. of issues	3
Common stock	$320,799,000
No. of issues	2
Debt	$120,000,000
No. of issues	1
Private placements	$0
Total financing for 1985	$440,799,000
Key underwriters	Salomon, Montgomery

Health Plan Inc. was the subject of the second largest common stock offering in February 1985.

Los Angeles' Fremont General Corp., which had held a 55% stake in Maxicare, sold 8.9 million shares of the health care company through a secondary public offering that totaled $230.2 million.

The February common stock deal was priced at $25.75 a share, while Maxicare's second common stock offering during the year was priced at $18.125 a share.

In November, the company sold 5 million shares to U.S. and Canadian investors for $90.6 million. However, the company had filed with the Securities and Exchange Commission to sell 6 million common shares. Maxicare reserved the other 1 million shares for sale directly in Europe.

In the company's debt deal, Maxicare issued $120 million of 25-year convertible subordinated debentures with a coupon of 7%. Salomon Brothers Inc. and Montgomery Securities co-managed all three Maxicare deals.

Hospital Corp. of America

Total public offerings	$374,011,000
No. of issues	3
Debt	$374,011,000
No. of issues	3
Private placements	$0
Total financing for 1985	$374,011,000
Key underwriters	Pru-Bache, Swiss Bank, Merrill

NASHVILLE, Tenn. — Hospital Corp. of America raised $374 million in the debt markets last year to finance its construction and acquisition programs for hospitals as well as general corporate purposes.

Its three deals included one 10-year Euronote offering for $100 million. The coupon on the September offering was 10¾%. Swiss Bank Corp. International led underwriters on the deal.

Domestically, HCA issued $100 million and $175 million of seven- and 30-year securities, respectively. Underwritten by Prudential-Bache Securities Inc., the seven-year offering in June carried a 10⅛% coupon and was priced at 99.7 to yield 10.192%. The 30-year sinking fund debentures, issued in December, carried an 11.25% coupon and were priced at just more than 99.6 to yield 11.293%. Merrill Lynch Capital Markets led underwriters on the deal. One other financial transaction during the year was a debt-for-equity exchange with Beverly Enterprises.

Beverly Enterprises

Total public offerings	$336,750,000
No. of issues	3
Common stock	$226,750,000
No. of issues	2
Debt	$110,000,000
No. of issues	1
Private placements	$30,000,000
No. of issues	1
Total financing for 1985	$366,750,000
Key underwriter	Merrill Lynch

PASADENA, Calif. — Beverly Enterprises' financing activity was geared toward raising cash for acquisitions and general corporate purposes as well as debt restructuring.

Its first of two common stock deals during 1985, however, not only improved its own cash position but also that of Hospital Corp. of America.

The transaction involved an equity-for-debt swap with HCA followed by a public offering of Beverly common shares.

Until then, HCA owned 4.4 million, or 18%, of Beverly shares outstanding. The size of HCA's stake along with the seat it holds on Beverly's board meant HCA had to use equity accounting on Beverly operating results.

In June, Beverly swapped HCA $120 million of convertible subordinated debentures due in 1990 for 3.5 million of its shares held by HCA. Beverly then retired those common shares and issued the same amount of new common on the open market.

The deal gave Beverly $122.5 million in capital that could be used for buying health facilities. It also allowed HCA to book some $9 million as cash (before the deal, HCA had to use equity accounting for Beverly operating

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Goldman Sachs Money Markets Inc.

Depositary

Manufacturers Hanover Trust Company

Arranger And Facility Agent

Commonwealth Bank of Australia

February 1986

greater pre-tax gain on its remaining 3% stake in Beverly. Although taxes accrue on that stake, they are not due immediately.

Five months later, Beverly repurchased the 7.5% convertibles to HCA in the debt-for-equity exchange with $110 million in proceeds generated from an offering of zero-coupon notes. The 18-year notes totaled $440 million in face value and were sold at 25 to yield 8%. The restructuring was done to convert short-term, five-year debt into long-term obligations.

In December, Beverly issued another 3 million shares of common, generating $104 million. About $77 million of the proceeds were used to repurchase debt issued in June 1983. The remainder was earmarked for general corporate purposes.

In the private markets, Beverly arranged one private placement of senior notes totaling $30 million.

Merrill Lynch Capital Markets was lead underwriter for Beverly's three public offerings, with Stephens Inc. acting as co-manager on the two stock deals. Manufacturers Hanover Trust Co. was the placement agent for the private deal.

National Medical Enterprises Inc.

Total public offerings	$149,285,000
No. of issues	3
Debt	$149,285,000
No. of issues	3
Private placements	$74,461,000
No. of issues	3
Total financing for 1985	$223,746,000
Key underwriters	Merrill Lynch, Edward D. Jones, J.C. Bradford

LOS ANGELES — National Medical Enterprises Inc. dipped into the public markets three times in early 1985 to raise capital for Hillhaven Corp., a subsidiary, and to reduce bank borrowings.

It came out with two 15-year debenture offerings in February and March — the first for $30 million and the second for $20 million — to provide Hillhaven with funds primarily for the acquisition of long-term health care facilities. The coupon on the February deal was 12%, while the March offering carried a 12.5% coupon.

A third offering in April raised $99.3 million for the purpose of reducing bank loans. The 10-year notes carried a 12⅛% coupon and were priced at 99.283 to yield 12.25%.

In the private placement markets, National Medical's three transactions included a $67.2 million offering of 25-year notes and a $1.5 million sale leaseback. A private placement of ownership interests totaled $5.8 million.

Merrill Lynch Capital Markets acted as placement agent in the private deals as well as underwriter for the April note offering. Edward D. Jones & Co. and J.C. Bradford & Co. co-managed the 15-year debenture deals.

Rail/shipping

Burlington Northern Inc.

Total public offerings	$299,750,000
No. of issues	4
Debt	$299,750,000
No. of issues	4
Private placements	$0
Total financing for 1985	$299,750,000
Key underwriters	Salomon, Morgan Stanley, Scherck Stein & Franc

SEATTLE — Burlington Northern Inc. burst into the capital markets in 1985 for the first time in three years, raising $299.7 million, all domestically.

Burlington has continued its furious financing pace, offering in January a $300 million 9⅝% 10-year domestic bond issue to pay off short-term debt used for its $725 million acquisition of Southland Royalty Co.

Luino Dell'osso, chief financial officer and senior vice president of finance and planning, doubts Burlington will be doing anymore financing for at least the rest of the year.

He said Burlington's re-entry last year into the capital markets was spurred in part by attractive rates. In August, it raised $249.7 million in a 30-year 11⅝% sinking-fund debentures for general corporate purposes.

"You can't do 30 years in Europe," Mr. Dell'osso said, explaining why Burlington decided on a domestic offering. The issue was rated Aa by Moody's Investors Service Inc. and A by Standard & Poor's Corp. In 1984, Burlington's general corporate debt was upgraded to its present rating from Baa.

In its other 1985 issues, Burlington sold AAA rated debt by issuing three equipment trust certificates through its Burlington Northern Railroad unit. He called the certificates "the least expensive way of financing" equipment purchases; because specific assets back the debt, it receives the top rating. Burlington used the $50 million in equipment trust certificate proceeds to buy locomotives. He said Burlington typically uses certificates to finance equipment purchases. The certificates' rates and maturities range from 9¼% to 11.85% and from one to seven years. The lead underwriter of the issue was Salomon Brothers Inc.

Despite being the largest issuer among railroad and shipping companies last year, Burlington Northern didn't use a 415 shelf registration. Mr. Dell'osso said such filings, which allow for speedier securities sales, are practical only "if you anticipate being in the market with some sort of regularity."

Scherck Stein & Franc Inc., a St. Louis-based investment banker, co-managed the $249.7 million debentures with Morgan Stanley.

In 1985, George Howison became treasurer of the Burlington parent company, replacing Frank Boyle, who was named chief financial officer of El Paso Natural Gas Co., a Burlington unit. Mr. Howison had been vice president of finance and planning for another unit, Plumb Creek Lumber Co.

Union Pacific Corp.

Total public offerings	$216,865,000
No. of issues	4
Debt	$216,865,000
No. of issues	4
Private placements	$0
Total financing for 1985	$216,865,000
Key underwriters	Salomon, Morgan Stanley, First Boston

NEW YORK — Union Pacific Corp. completed four public offerings during the year — one of them in the international arena.

In early April, the company offered $100 million of seven-year notes in the Euobond market to raise capital for general corporate purposes. The notes carried an 11.5% coupon. Credit Suisse First Boston was lead underwriter on the deal.

The company's Missouri Pacific Railroad Co., meanwhile, raised $117 million to buy rail equipment in three offerings of equipment trust certificates. In June, the issuer came out with a $41.5 million offering of 10.35% certificates due in August 1999 and a $38 million serial offering, with the certificates due between 1986 and 1997. Both transactions were managed by First Boston Corp. and Salomon Brothers Inc.

A third issue of equipment trust certificates due 1986 to 2000 came out in December and raised $37.5 million for Missouri Pacific. Morgan Stanley & Co. and Kidder, Peabody & Co. were the underwriters.

Chicago Pacific Corp.

Total public offerings	$197,360,000
No. of issues	1
Debt	$197,360,000
No. of issues	1
Private placements	$0
Total financing for 1985	$197,360,000
Key underwriter	Goldman, Sachs

CHICAGO — Chicago Pacific Corp. took advantage of the rising bond market in mid-July to raise cash for the acquisition of operating companies.

The Federal Reserve Board had revised its 1985 money supply target upward, dispelling anxiety over a Fed tightening of the money supply. As a result, both the stock and bond markets climbed and issuers flooded the markets with new financings.

Chicago Pacific offered $200 million of 14% subordinated notes due in 1995. The non-syndicated deal was priced at $98.68 to yield 14.25%. Net proceeds to the company came to almost $197.4 million. Goldman, Sachs & Co. underwrote the issue.

Rio Grande Industries Inc.

Total public offerings	$180,000,000
No. of issues	2
Debt	$180,000,000
No. of issues	2
Private placements	$0
Total financing for 1985	$180,000,000
Key underwriter	Morgan Stanley

DENVER — Rio Grande Industries Inc. issued $180 million last year in two domestic debt deals.

The 10- and 20-year obligations both made their debut May 2. The 10-year senior subordinated note issue carried an interest rate of 13⅝% and totaled $100 million. In addition, the 20-year deal consisted of $80 million of subordinated debentures, with a fixed coupon of 14⅜%. Both issues were offered at par. Morgan Stanley & Co. managed the deals.

CSX Corp.

Total public offerings	$149,379,000
No. of issues	2
Debt	$149,379,000
No. of issues	2
Private placements	$0
Total financing for 1985	$149,379,000
Key underwriters	Credit Suisse First Boston, Daiwa

RICHMOND, Va. — CSX Corp. raised $149 million in two overseas deals last year to help refinance short-term debt and for general corporate purposes.

The railroad company came out with a seven-year Eurodollar issue in March, with proceeds totaling $99.8 million. In December, it raised another $49.6 million with a 10-year Euroyen note deal. Coupons on the offerings were 11.5% and 6.75%, respectively.

Credit Suisse First Boston was sole manager on the Eurodollar issue, while Daiwa Securities lead managed the yen-denominated offering.

An editorial update on the use of leasing as a corporate financing tool will run in the April 14 issue.

New issues of corporate securities

February 17 — February 28, 1986

Issue date	Company	Amount ($ mil.)	Type of security	Offering price Debt (%) Share ($)	Gross spread as % offer price	Where traded (to list)	Manager
Debt							
2/25	Atlantic Richfield Co.	150.00	Subs.	99.67%	.375	NY	Salomon/First Boston
2/27	New England Tel. & Teleg. Co.	100.00	Debs.	99.29%	.262	OTC	Salomon/First Boston/Merrill Lynch/Shearson Lehman
2/25	Pacific Bell	300.00	Debs.	98.45%	.889	OTC	First Boston/Goldman, Sachs/Kidder Peabody/Merrill/Salomon
2/27	Southern California Edison Co.*	300.00	Fst. & Ref. Mgt.	99.80%	.702	NY	FBC/MS/DBL/EFH/SLB/BEAR/PAINE-W
2/27	Ford Motor Credit Co.	300.00	Note	99.80%	.461	OTC	Goldman, Sachs
2/27	Chevron Corp.	300.00	Note	99.62%	.452	NY	Salomon/Merrill Lynch
2/20	New Jersey Bell Telephone Co.*	300.00	Debs.	99.25%	.737	NY	FBC/DLJ/SM/PBS/SAL/DB/PAINE-W
2/28	The Boeing Co.	250.00	Note	99.50%	.503	NY	First Boston
2/27	General Electric Credit Corp.*	250.00	Extend. Note	99.66%	.284	NY	MS/EFH/SBH/BEAR/DLJ/DBL/EF
2/27	General Electric Credit Corp.*	250.00	Extend. Note	99.27%	.272	NY	MS/EFH/DLJ/PBS/SBH/BEAR/DBL/KP
2/27	Citicorp	250.00	Sub. Note	99.75%	.800	OTC	Salomon/Merrill Lynch
2/25	General Motors Acceptance Corp.	250.00	Note	99.66%	.426	NY	Merrill Lynch/First Boston/Morgan Stanley/Salomon
2/25	General Motors Acceptance Corp.	250.00	Note	100.00%	.600	NY	Merrill Lynch/First Boston/Morgan Stanley/Salomon
2/19	Student Loan Marketing Assoc.	150.00	Note	Market	Market	OTC	Morgan Stanley
2/18	Atlantic Richfield Co.	250.00	Note	99.90%	.326	NY	Salomon/First Boston
Common Stock							
2/26	Motorola Inc.	302.00		$43.25	3.33	NY/MW	Goldman, Sachs
2/25	Loews Corp.	285.20		$63.37	1.99	NY	Salomon/Morgan Stanley
2/25	Chesebrough-Pond's Inc.	202.5		$40.50	2.10	NY	Shearson Lehman
2/27	Hartford National Corp.	95.60		$38.25	3.27	OTC	Kidder Peabody/First Boston
2/20	Burger King Investors Master L.P.	81.40		$20.00	6.50	IPO (NY)	MLCM/SBH/Boettcher/Bradford/ DAIN-ROS*
2/26	The Italy Fund Inc.	66.00		$12.00	7.00	IPO (NY)	Shearson Lehman/Salomon/Daiwa Securities
2/20	Grumman Corp.	58.80		$23.50	4.26	NY/BO*	Dillon, Read/Goldman, Sachs
2/21	Republic New York Corp.	58.50		$39.00	2.49	NY/LON	Salomon/Merrill Lynch/Bear Stearns/Shearson Lehman
2/20	PaineWebber Residential Realty	52.50		$10.00	7.50	IPO (AM)	PaineWebber
2/20	Allegheny Beverage Corp.	52.30		$25.50	4.90	OTC	Smith Barney, Harris Upham

Source: Securities Data Corp., New York
**Competitive*

Sub. Note: Subordinated note
Extend. Note: Extendable notes
Debs.: Debentures
Fst. & Ref. Mtg.: First & refunding mortgage bonds
'First Boston/Morgan Stanley/Drexel Burnham Lambert/E.F. Hutton/Shearson Lehman/Bear Stearns/PaineWebber

AM: American Stock Exchange
NY: New York Stock Exchange
OTC: Over the Counter
IPO: Initial Public Offering
MW: Midwest Stock Exchange

Cash Management

Execs assail proposed ACH limits

Say ceiling would counter Fed efforts to cut float, paper checks

By Fred Williams

Cash management executives are opposed o the Federal Reserve Bank's imposition of imits on the size of transactions on the utomated clearinghouse network.

Such limits would defeat the Federal eserve's goals of reducing float and dis- ouraging the use of paper checks, accord- ng to most of those responding to the Fed's equest for comments in its review of the isks arising from ACH transfers.

The Fed is expected to announce its find- ngs in May, but many experts believe it ventually will limit the size of ACH trans- ctions to about $1 million from its cur- ent limit of just less than $100 million.

Paul J. Beehler, the new director of trea- ury control for E.F. Hutton & Co., who has een given responsibility for revamping the roubled firm's banking and cash manage- nent system, believes the Fed should not estrict the size of ACH transactions and ccused it of "talking out of both sides of its nouth" in its efforts to eliminate float from he funds transfer system.

Both the Fed and ACH executives have documented increased use of the low-cost ACH for large-dollar payment transactions.

According to the Fed staff paper con- tained in its request (published in May 1985) for comments on risks associated with large-dollar ACH payments, "it appears that the ACH may be evolving into a pay- ments mechanism with many similarities to large-dollar funds transfer systems . . . The types of payments made through the ACH are changing. Corporations are now using the ACH to concentrate balances at lead banks, to fund accounts of geographically dispersed operating units, to repay loans and to make vendor payments. These new uses for the ACH mechanism have contri- buted to the increasing number of large- dollar payments processed."

"What difference does the dollar amount make?" asked Mr. Beehler. He said a limita- tion would have minimal effect on Hutton, which uses the ACH extensively to concen- trate funds from its 420 branches rather than using depository transfer checks. Hut- ton's average ACH transaction now amounts to about $24,000 per branch, he said. "But that's not to say that we wouldn't consider using the ACH for large-dollar transactions at some point in order to han- dle the float issues," he said.

"The Fed shouldn't be taking any action. I think it is an inconsistent position for the Fed to take and it's confusing to the corpo- rate user . . . We use the ACH to reduce collection float and to make it more pre- dictable and uniform. The Fed seems to be talking out of both sides of its mouth. On one hand it wants corporations to use the ACH as an efficient electronic funds trans- fer vehicle to reduce float, and then it turns around and wants to reduce the dollar amount of each transaction."

Elliott C. McEntee, associate director at the Board of Governors of the Federal Reserve System in Washington, said most of the comments received by the Fed were opposed to limiting ACH transactions.

He said the responses are being analyzed and the staff is expected to make a recom- mendation to the board in April. He said the findings should be ready for public com- ment in May.

He described the undertaking as a fact- finding mission to find out what risks are associated with large-dollar ACH transac- tions in light of its increased use as a high- dollar wire transfer vehicle.

Another Fed spokesman said there might be policy guidelines published that limit the size of ACH transactions because the ACH "is primarily a small-dollar system."

The National Corporate Cash Manage-

Continued on page 37

Analysts score a bull's-eye on rate-cut call

By Richard J. Gillespie

NEW YORK — Most money market analysts and economists were right on target with their most recent predictions.

Regardless of whether interest rates were headed up or down, money market sources inter- viewed in the three days leading up to the U.S. discount rate cut March 7 essentially said the same thing. The actions of the German or Japanese central banks would determine the action of the Federal Reserve.

When the Federal Reserve eventually cut the discount rate to 7% from 7.5%, where it had stayed since November as long- term rates plunged more than 200 basis points, it was clearly a reaction to similar moves by the West German and Japanese cen- tral banks made not 24 hours before.

Money market analysts inter- viewed two days before the latest cut stated their belief that the Federal Reserve would not cut the discourt rate until the Germans especially, had cut their own rate.

"We got lucky this time," said Maria Fiorini Ramirez, a money market analyst at Drexel Burn- ham Lambert Inc., New York.

Possibly as a result of an ini- tiative agreed to by the five major Western industrialized countries last fall, the Federal Reserve has been waiting for either West Germany or for Japan to cut its own discount rate before it would make a sim- ilar move in the United States, industry analysts observed.

While a spokeswoman for the Federal Reserve said the agree- ment struck by the so-called Group of Five related specifi- cally to the strength of the U.S. dollar on foreign currency mar- kets and did not contain any pact to coordinate a general interest rate decline, the G-5 agreement was an important ingredient in the rate cut because of concerns over the U.S. dollar.

To prevent the dollar from falling too rapidly, interest rate cuts will have to be coordinated

Continued on page 36

Photo by Arnie Adler

Foundation Controller Gary Kelley

Statue repair a big business

By Richard J. Gillespie

NEW YORK — The Statue of Lib- erty-Ellis Island Foundation Inc. has become "a very big business" with more than 100 bank relationships, said Gary Kelley, controller of the foundation.

The foundation has about $233 million in cash and pledges from mil- lions of donors. Cost overruns have prompted foundation leaders to raise the goal to $250 million from $225 million.

Many of the banks — including seven of the nation's 10 largest — are used for one-way contribution accounts through an arrangement

Continued on page 36

Payden & Rygel index of short maturities assets*

(for month ending February 28, 1986)

	February 1986	Quarter ending 12/31/85	Year to date	12 months ending 2/28/86	Yield level monthly change*
	Unannualized total returns				
90 Day					
U.S. Treasury Bill	0.5430	1.8910	1.1865	8.2536	+05
Domestic C.D.	0.6343	2.0447	1.2991	8.6649	−18
Euro $ C.D.	0.6508	2.0712	1.3101	8.8582	−22
180 Day					
U.S. Treasury Bill	0.5859	1.9397	1.2436	9.1694	−04
Domestic C.D.	0.6669	2.0989	1.3071	9.3308	−18
Euro $ C.D.	0.7173	2.1525	1.3204	9.5634	−27
1 Year					
U.S. Treasury Note	0.7026	2.3533	1.3789	10.7222	−14
2 Year					
U.S. Treasury Note	1.1031	3.8000	1.7707	15.0838	−28

*Figures are unannualized total returns. Year-to-date and 12 month figures linked monthly. 90 and 180 Day Treasury Bill yield level changes on discount basis.

*Basis points.

Source: Payden & Rygel, Los Angeles, California 90017

DYNAMIC VALUE PORTFOLIOS

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Lee C. Garcia Daniel F. Sullivan

Managing Directors

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2,500 seek certification

NEW YORK — More than 2,500 ash management executives and ank officials have requested reg- stration materials for the National Corporate Cash Manage- ent Association's new certifica- ion program.

Successful completion of the ex-

Notes

professional designation, certified cash manager, or CCM.

"The enthusiastic response tells us that we're providing a service that cash managers and people in related services are looking for," domestic banking at Champion Spark Plug Co.

Mr. Goveia is chairman of the NCCMA's certification committee.

According to the NCCMA, 75% of the requests for materials have come from corporate cash manag- ers.

Another 18% have come from people in banking services, and

C2710-2

Pension shareholders exercising proxy vote

By Alan Krauss

Pension funds and other institutional shareholders that once voted with their feet when they disagreed with corporate management now vote with their proxies.

• In 1985, the $29.2 billion California Public Employees' Retirement System voted proxies against more than 130 management-proposed resolutions, such as 77 anti-takeover proposals, 42 to create classified or staggered boards of directors and more than a dozen on greenmail.

• Batterymarch Financial Management, Boston, which manages about $12 billion in tax-exempt assets, has voted on about 30 resolutions this year on behalf of its clients on such topics as staggered boards and "fair-pricing."

• Last December, officials of the United Brotherhood of Carpenters, Washington, representing carpenters' locals nationwide, attended a special shareholders meeting of Weyerhaeuser Co., Tacoma, Wash., to rally opposition among institutional shareholders to bylaw amendments that included staggering the board and requiring supermajority votes to effect subsequent corporate gov-

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PROXY ☐
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Pensions & Investment Age

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Big firms' plans targeted

Tax status menaced

By Joel Chernoff

WASHINGTON — Companies with more than one line of business could lose tax qualifications for their retirement plans under new tax overhaul legislation unveiled by Sen. Bob Packwood, R-Ore.

The legislation would impose a new coverage test that would have a devastating effect on larger employers, said Mark Ugoretz, executive director of the ERISA Industry Committee, a Washington lobby group. "This is what all my members are concerned about," he said.

"Many large plans, if not most, will not be able to meet" the new test, said Richard Fay, a partner in the law firm Reed Smith Shaw & McClay, Washington.

In addition, the proposal would eliminate a revenue ruling enabling employers to establish separate retirement plans for salaried employees, and would give the Treasury Department authority to write new coverage tests, Mr. Fay said.

"I think it is extremely dangerous to make such a sweeping change and allocate the responsibility to the Department of Treasury," he said.

Under current law, a plan must meet either a percentage test or cover a fair cross section of employees.

While the percentage test would change moderately, Sen. Packwood's proposal would rewrite the fair cross-section test, which is used by most large employers.

The proposal would require the percentage of highly paid employees within any single line of business to be between 50% and 200% of the percentage of total highly paid personnel in the entire corporation.

For example, if a 200,000-person employer had 4% of its employees considered highly paid, it could have no less than 2% or no more than 8% of those workers within any single line of business. With highly paid workers generally defined as those earning $50,000 or more per year, the new test could wreak havoc on any division consisting of professionals.

Similarly, a corporate unit con-

Continued on page 53

Funds push managers to hire minority execs

By Trudy Ring
and Chuck Paustian

Public pension fund officials are pressuring investment managers to employ ethnic minorities in key investment positions, *Pensions & Investment Age* has learned.

As a result, money managers not meeting a fund's policy on minorities sometimes lose business to those that do.

In addition, firms without minority ownership or participation could lose existing business from pension funds with aggressive affirmative action policies.

Many managers say they would be happy to comply with policies requiring minority employees in positions of portfolio manager or higher, if only they could find such employees.

In the meantime, some all-white investment counseling firms have set up joint venture partnerships with minority-owned firms.

The amount of pressure from pension fund executives and trustees varies, but investment managers and public pension fund executives are very aware of it.

"During my travels, I come in contact with many people, and they are very actively seeking minority participation in the investment management process," said Curtis O. Townsend, deputy director of finance-pension fund asset manager for Philadelphia.

Policies adopted by public funds range from requesting the managers to have their own affirmative action policy to requiring investment managers to employ minorities in key investment roles.

Los Angeles' city pension funds are under a requirement to contract only with firms that have affirmative action plans, said Gary Mattingly, general manager of the $1.8 billion Los Angeles Fire & Police Pension System.

"This does not mean they have to have a minority employed, but they have to have addressed the issue," he said. In his experience, no investment firm has refused to have an affirmative action plan.

The policy for the State of Connecticut Trust Funds, Hartford, also states a manager must have an affirmative action program.

Barbara Reid, investment officer-social compliance for the $4.1 billion system, said the fund requires annual reports from its managers on their affirmative action policies.

"We don't have a criteria as such that requires a certain percentage to be minorities or women,"

Continued on page 54

N.Y. skips contributions

$1.4 billion to be amortized over 17 years

By Ed Christman

ALBANY, N.Y. — New York will skip two annual contributions totaling $1.4 billion to the New York State Common Retirement Fund and will amortize the amount over the next 17 years, paying 8% interest on it.

The controversial move, which was hammered out by the staffs of Gov. Mario M. Cuomo and State Comptroller Edward V. Regan, will become part of the state budget, which the Legislature is required to approve by April 1, the beginning of the fiscal year.

As part of the proposal, pension fund payments will be moved from June to later in the year, allowing the state to reduce its short-term borrowing. Also, pension fund payments will be restructured, ending a 50-year practice of paying contributions two years late.

The reduction in short-term borrowing was the catalyst for the proposal.

The move allows the state to reduce significantly the interest on short-term debt while strengthening the financial position of the pension system, said a joint statement released by Messrs. Cuomo and Regan.

In addition, it will put the state in a better light for the rating agencies, which next month will review the state's financial situation, they said.

The Common Fund, which has employee benefit assets of approximately $27 billion, has 775,000 participants among state and

Continued on page 49

Photo by Michael Marcotte

Saab speeds up California collections

Saab-Scania of America Inc will recognize a savings of nearly $750,000 in 1986 following its conversion to electronic payments via the automated clearinghouse network for its dealerships in California. See story in the cash management section, page 31.

Directory of financial

Consolidated Papers goes to 25% passive

By Ed Christman

WISCONSIN RAPIDS, Wis. — Officials of the $200 million Consolidated Papers Inc. pension fund have moved at least 25% of assets to passive management because of dissatisfaction with the overall performance of active managers in the past two years.

LeRoy Engelhardt, vice president-finance, said six managers were hired and three were terminated. He declined to name the terminated managers, nor the amount taken from each and reassigned to new managers.

However, officials at First Wisconsin National Bank of Madison and Norwest Bank, Minneapolis, confirmed Consolidated Papers terminated accounts with them. Neither would reveal the amount of assets involved.

The third terminated manager reportedly was Manufacturers Hanover Investment Corp., New York. Officials would not comment.

New fixed-income managers are Minton/Newbold's Capital Management, Philadelphia, and Liberty Capital Management, New York. New equity managers are Dimensional Fund Advisors, Santa Monica, Calif.; Disciplined Investment Advisors, Evanston, Ill.; W.P. Stewart & Co., New York; and State Street Bank & Trust Co., Boston.

The passive component includes a $21 million equity index fund, a $28 million dedicated portfolio and an undisclosed amount in zero-coupon bonds.

The fund has turned to passive management "to see what happens with it over the next few years," Mr. Engelhardt said.

He indicated he would consider increasing the passive commitment if results are satisfactory.

The index fund is being run by State Street Bank, which previously acted solely as the fund's master trustee. In addition, it is "holding the zero-coupon bonds," said Mr. Engelhardt.

The dedicated portfolio is being run by Minton/Newbold's. Of the $28 million, $6 million will cover the benefits owed to employees of a divested subsidiary.

The assets of that subsidiary, Consoweld Corp., Wisconsin Rapids, were sold to LOF Plastics Inc., Troy, Mich. Consolidated Papers retains the Consoweld company shell and the pension liabilities of employees that went to LOF as part of the deal.

The other $22 million will cover retired lives at Consolidated Paper. Mr. Engelhardt declined to give details of the dedication.

Harris Trust and Savings Bank, Chicago, was retained as an active fixed-income manager, and IDS Advisory Group, Minneapolis, Equitable Investment Management Corp. and Lazard Freres Asset Management, both in New York, as equity managers.

The asset mix is about 56% equity, 40% bonds and 4% cash. The equity component has increased from 47.7% six months ago mainly because of market conditions, Mr. Engelhardt said. ■

California Teachers ups stocks $2 billion

By Steve Hemmerick

SACRAMENTO, Calif. — The $16 billion California State Teachers' Retirement System has hired five managers to invest $100 million each in the growth stocks of medium-capitalization companies.

Fund officials also revealed they increased indexed equity assets by $1.5 billion at the beginning of the fourth quarter of 1985 in one of the largest single index fund transactions ever.

They also hired Pension Real Estate Services Inc., San Diego, to assist in putting together a real estate strategy. The system has 2% to 3% of assets in equity real estate, but wants to increase that to 10% or more to provide diversity.

The firms hired as active managers are: Provident Investment Counsel, Pasadena; Denver Investment Advisors, Denver; Wright Investors' Service, Bridgeport, Conn.; Pilgrim, Baxter, Hoyt & Greig, Philadelphia; and Equitable Investment Management Corp., New York.

The additions are part of trustees' plans to boost equity holdings and add multiple active managers with a mix of styles.

The new firms and indexation were funded from $2 billion in cash.

Tom Flanigan, chief investment officer for the system, acknowledged growth stocks have been out of favor, but said they could make a comeback. He said the system also will hire defensive managers, but isn't racing to do so.

Mr. Flanigan said the system put an additional $1.5 billion into index funds with Wells Fargo Investment Advisors, San Francisco, just prior to the fourth-quarter market rally.

Wells Fargo now manages about $4.5 billion in indexed assets for the system: About $2.7 billion is in a fund that tracks the S&P 500, while $1.7 billion is in an "extended" fund that includes more of the smaller stocks as well as large-capitalization ones.

The distribution of the $1.5 billion was based on market weightings, Mr. Flanigan added.

In this instance, he said, the index funds met the system's need to implement a decision quickly, something that would have been difficult because of the sheer bulk of the assets involved.

The decision to put the assets into the index funds he said, was made in the belief the stock market was going to rise further, he said.

"We felt that interest rates were going to single digits long before they did, and we felt that an interest rate drop would induce the stock market to rally," said Mr. Flanigan.

Had the assets remained in cash, they probably would have earned around 9%, Mr. Flanigan said.

Instead, he said, the index funds returned about 17.25%, with some of the large-capitalization stocks in them returning more than 30%. "I don't think anyone has put that kind of money into the market prior to a rally like this," said Mr. Flanigan.

The rather swift movement of the cash into stocks underscored Mr. Flanigan's belief that index funds solve problems of size and inflexibility faced by lumbering super funds.

The new moves in the stock

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Timothy P. Prince United Nations fund chief

Eugene B. and Betty Burroughs M.D. Sass Investors

Arthur Williams III managing director Simms Capital Mgmt.

'Goodbye' to buy side

Eight pension execs join managers, consultants

By Rose Darby

Eight pension executives have given up their jobs for the lure of opportunities as money managers and consultants.

Two have joined established investment management firms, one will do so in May, two have joined an investment management consulting firm and three have launched their own money management firms.

Those interviewed said they are changing jobs for the opportunity to work with people they know and respect in a more entrepreneurial environment than corporations can offer.

The eight are:

• Arthur Williams III, former vice president-pension fund investments for the $550 million Merrill Lynch & Co. Inc. pension fund in New York.

Mr. Williams joined Simms Capital Management as a managing director. He will be responsible for U.S. pension fund clients, some product development and some marketing, said Bob Simms, chairman.

His position at Merrill Lynch has not been filled. Courtney F. Jones, chief financial officer, temporarily is overseeing the pension fund.

Mr. Williams said working in an entrepreneurial environment prompted the move.

"Merrill Lynch is as entrepreneurial as you can get, but it's still a big company," he said.

"I wanted to be working with people who have a commitment to a common cause, who are all succeeding together or failing together. That was the thing that was motivating me.

"Financial opportunity is everywhere, but that's not why I moved. It was being part of something that was exciting and going somewhere with really top level people."

• William L. Green, former manager-pension investments for the roughly $930 million Texas Instruments Inc. pension fund in Dallas.

Mr. Green joined Rogers, Casey & Barksdale Inc., Stamford, as a consultant.

He was replaced at TI by Irene Leary, formerly an international financial analyst for the company.

• Timothy P. Prince, chief-investment management section for the $4.4 billion United Nations Joint Staff Pension Fund, New York.

Mr. Prince is leaving at the end of April. He refused to discuss where he is going, but one source said he is expected to join a small investment management boutique in May.

Mr. Prince had spent seven years at the United Nations; no replacement has been named. "I leave the U.N. with a great deal of regret," he said. "It's been an extraordinarily interesting and stimulating seven years."

• Seth Rosenberg, former manager-benefit financing for the roughly $760 million Pfizer Inc. pension fund in New York.

Mr. Rosenberg also joined Rogers, Casey & Barksdale, where he will do investment supervision of trust company collective funds and other investment programs, as well as consulting.

He has not yet been replaced at Pfizer.

• Walter R. Good, former vice president-pension asset management, and Roy Hermansen, former director, of the roughly $1.1 billion pension fund of The Continental Group, Stamford, Conn.

Messrs. Good and Hermansen launched a joint venture with Mellon Bank Corp., Pittsburgh, called Mellon Universe Management Group in Stamford.

Christine Williams, manager-pension investment administration will administer The Continental Group's fund, Mr. Good said.

Mr. Good said he and Mr. Hermansen left following a pension fund restructuring in which a fixed-income approach matching maturities to liabilities was adopted.

Their new firm, a wholly owned subsidiary of Mellon Bank, revolves around a product that emphasizes the movement of portfolios from one investment style to another at appropriate times.

• William V. Ferdinand, investment manager for the about $2.8 billion Union Carbide Corp. pension fund, left to form his own firm — Coastal Partners — which opened in New York in March. No replacement has been named yet.

• Eugene B. Burroughs left his post as director of the investment department of the International Brotherhood of Teamsters, Washington, to open

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Placement totals don't add up

Dispute arises over definition of private financings

By Barry B. Burr

NEW YORK — Private placements totaled either $73 billion or $53 billion last year.

The correct figure depends on which definition of private placement is used.

The definition has caused a controversy on Wall Street on how broadly such financings should be defined.

A broad definition would include registration rights private placements. Such placements are sold with provisions permitting the securities to be registered for sale in the capital markets.

The dispute leaves in doubt which firms ranked as the leading private placement agents.

The controversy affects Drexel Burnham Lambert Inc. more than any other agent: Private placements with registration rights accounted for the bulk of the firm's private financings because of its intense takeover activity.

But the dispute affects significantly the rankings of other firms as well, including Salomon Brothers Inc.; Goldman, Sachs & Co.; First Boston Corp.; and Merrill Lynch Capital Markets.

Aside from the rights registration issue, the controversy includes whether privately placed certificates of deposit and collateralized mortgage obligations ought to be considered in the private placement tallies.

Of the $73 billion in private placements under the broad definition, $8.1 billion was in mortgage-related deals, $5.9 billion in certificates of deposit and $5.8 billion in registration rights. The vast majority was in the undisputed so-called "plain vanilla" placements, totaling $53 billion and including $11.5 billion in lease-related deals and $2.6 billion in acquisition-related deals.

Depending on which tally is used, Salomon or Goldman ranked first, while Drexel Burnham Lambert ranked second or 10th.

In short, the broader definition raises Salomon and Drexel Burnham Lambert in the rankings, while a narrower definition favors Goldman, Merrill Lynch and First Boston.

Registration rights accounted for $5.7 billion of Drexel Burnham Lambert's $7.8 billion in private placements, or 51 of its total 102 in deals.

Drexel did 98.9% of the $5.8 billion in registration rights private placements last year. (Salomon and Bear, Stearns & Co. accounted for the two deals Drexel did not handle.)

Gerald L. Brodsky, Drexel managing director, said he was amazed his firm had nearly 99% of the registration rights placements done last year.

He said the placements are particularly useful in takeovers allowing the acquiring firm to come up with financing quicker to close a deal, avoiding disclosure and other registration delays entailed by public offerings. Their advantage over conventional placements is that registration rights placements are sold privately at terms better to the issuer and close to those available to public offerings.

"We believe the issuer gets better overall terms by incorporating registration rights because it does provide better liquidity," he said.

The gripe is Drexel's registration rights placements aren't truly private because they are turned around and sold in the capital markets.

Mr. Brodsky said Drexel keeps no exact figures, but added, "The substantial portion of these placements with registration rights ultimately make it into the public markets."

He was a bit bemused by the dispute, noting, "This is the first year they made a big deal out of private placements with registration rights."

Representatives of other firms were unavailable for comment.

Officials at Goldman, Sachs, First Boston and Merrill Lynch reportedly were so upset at using a broad definition of private placements they refused to provide data for the last half of 1985 on their placements involving CDs and CMOs.

IDD Information Services Inc., New York, totaled the placements and ranked the firms according to both a broad and a narrow definition of private placements.

According to the broad definition that includes CDs, CMOs and registration rights, the $73 billion in private placements was up 37% from the $53 billion in 1984. There were 2,190 deals in 1985, up from 1,788 the year before.

The rankings under the broad category are:

1. Salomon, $10.5 billion, 169 deals.
2. Drexel Burnham Lambert, $7.8 billion, 102 deals.
3. Goldman, Sachs, $7.2 billion, 146 deals.
4. Merrill Lynch, $7 billion, 179 deals.
5. First Boston, $5.4 billion, 98 deals.
6. PaineWebber Inc., $4.2 billion, 149 deals.
7. Shearson Lehman Brothers Inc., $3.3. billion, 142 deals.
8. Morgan Stanley & Co., $3.1 billion, 44 deals.
9. Citicorp, $2.9 billion, 104 deals.
10. Kidder Peabody & Co., $2.8 billion, 91 deals.

But in the narrower definition the $53 billion in conventional placements accounted for only 1,587 deals last year. A comparable tally for 1984 wasn't available.

The rankings of conventional private placement agents are:

1. Goldman, Sachs, $6.7 billion, 123 deals.
2. Salomon, $6.2 billion in 68 deals.
3. Merrill Lynch, $5.4 billion, 120 deals.
4. First Boston, $4.8 billion, 91 deals.
5. PaineWebber, $3.4 billion, 113 deals.
6. Shearson, $2.7 billion, 118 deals.
7. Morgan Stanley, $2.69 billion, 39 deals.
8. Kidder Peabody, $2.67 billion, 86 deals.
9. Morgan Guaranty Trust Co., $2.4 billion, 48 deals.
10. Drexel Burnham, $2 billion,

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Pensions & Investment Age

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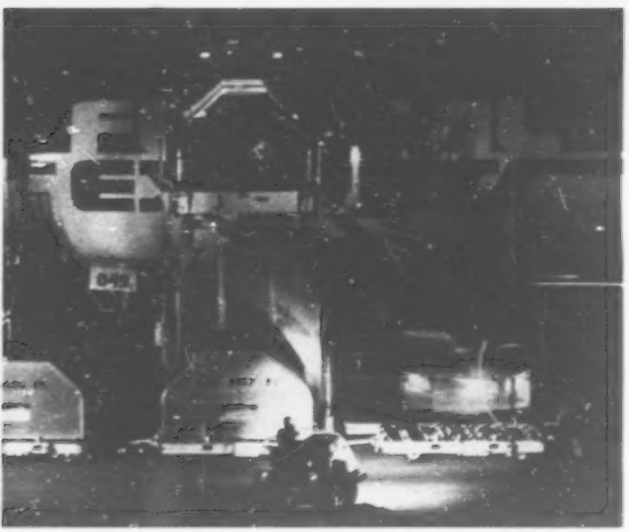

While tax reform may slow leasing deals, officials of Federal Express Aviation Services Inc. expect airline leasing to stay healthy.

Tax proposals fought

Leasing targeted

By Barry B. Burr

The fate of much of the equipment and plant leasing industry lies in the hands of Congress.

Without much success so far, lessors and their lobbyists are fighting sweeping tax proposals in the Senate and House that likely would end many lucrative investment tax benefits and raise the cost of new capital investment.

The pending bills threaten leasing generally by ending the investment tax credit, which essentially amounts to an immediate government subsidy of 10% of the value of new plants or equipment.

In addition, the bills would impose a minimum tax on profitable companies, preventing them from sheltering a large part their earnings from taxes by tightening depreciating and other investment incentive tax benefits. General Electric Co., whose General Electric Credit Corp. is a major lessor, has been the most publicized user of such legal sheltering.

The bills also would slow down depreciation.

According to leasing industry executives, the pending legislation is having the most impact on leasing volume this year.

They say the outlook for their industry depends on the proposed tax changes more [illegible] on any other capital investment incentive, including the general drop in the cost of capital caused by declining interest rates and falling inflation or the demand for new equipment due to industrial modernization and restructuring programs.

"We stand in a situation where, at a stroke of a pen, Congress could cause leasing to expand dramatically or shrink dramatically," said Richard A. Sun, vice president, First Boston Corp., New York.

Satellite leasing, in particular, which had peaked and was declining, will be at a standstill because of the loss of the space shuttle Challenger.

The outlook for using the only alternative launch vehicle, the unmanned Ariane rocket, from French Guiana appears little more promising because of difficulty with refitting satellites designed for shuttle-ferried orbiting and problems with launchings. One Ariane rocket was destroyed shortly after liftoff last year. It was carrying a GTE Corp.-leased satellite.

GTE launched another satellite with Ariane in March, and is scheduled to launch two others; all three, however, are owned outright.

Leasing could pick up for foreign-owned plants as more are built in the United States. Mazda Motor Corp. is arranging some $500 million in financing to lease its automobile plant in Flat Rock, Mich.

Foreign units generally tend to have, initially, low earnings and are unable to use all their investment tax benefits.

They can lower their capital financing costs by leasing.

Continued on page 34

IBM gooses earnings

Accounting changes add millions; more considered

By Richard J. Gillespie

ARMONK, N.Y. — IBM Corp. has adopted less conservative accounting policies in the past three years — possibly to enhance its level of earnings — and is considering early adoption of Financial Accounting Standards Board Statement 87 on the reporting of pension liabilities.

The early adoption of FASB 87 would enhance IBM's earnings by about $100 million before taxes, according to one analyst.

Accounting policy changes IBM has adopted since 1983 have enhanced its earnings by perhaps as much as $1.20 per share. They include switching to straight-line depreciation and raising the actuarially assumed rate of return on its $14.8 billion pension plan.

Jon Rotenstreich, vice president and treasurer, confirmed IBM executives are considering early implementation of FASB 87, but he could not say when that would happen. A company spokeswoman said officials will "re-examine its assumed rates of return" if they adopt the new standard.

Like early implementation of FASB 87, most accounting changes made by IBM have boosted earnings per share.

Thornton O'Glove, an analyst who follows IBM and the author of the Quality of Earnings Report, Englewood Cliffs, N.J., said he views IBM's ongoing accounting changes as a good thing, and generally positive for investors.

Citing an accounting equivalent of Gresham's Law, that bad money drives out good, he said liberal accounting principles drive out conservative accounting principles. The changes made at IBM not only bring it into line with its industrial peer group, but also add about $1.20 in earnings per share for 1985.

He believes the net result is that IBM's share price is 20 points higher than it would otherwise be. (IBM was at 149½ April 8.)

"Professors like to say that the efficient market adjusts stock prices for accounting policies, but that's a lot of hogwash," he said. He noted IBM's price-earnings multiple actually rose throughout the period when the more liberal accounting policies were adopted.

"Despite these changes, IBM is not out of line at all. You could not say that it was more liberal than its peers. These changes have just brought it into line with its competitors," said Mr. O'Glove.

Until 1983, IBM's conservative accounting policies spilled over to the reporting of its pension obligations. The company in 1983 adopted a two-stage interest assumption, using 7.5% for the first 10 years after adoption of the assumed rate, and 5.5% thereafter. These were raised to 8% and 6%, respectively, last year.

In 1983, IBM reported a fund contribution of $1.18 billion, including amortization. By 1985, the annual contribution had dropped to $868 million.

As a result, pension fund costs as a percentage of compensation at Big Blue dipped to 5% in 1985 from 9.7% in 1983. The contribution is expected to

Continued on page 39

FASB 87 process called a charade

By Richard J. Gillespie

The lengthy process leading to the adoption of Financial Accounting Standards Board Statement 87, which placed pension liabilities on corporate balance sheets, was a charade, some members of the advisory task force on the standard charge.

They contend the FASB staff assigned to the project had decided on the standard about 10 years before it was adopted, and ignored opposition views along the way.

From the time the staff made up its mind on Statement 87, some task force members claim, the FASB staff engaged in a shrewd

ingly heated opposition from among the very task force members it had appointed earlier.

But Timothy S. Lucas, the project director for the FASB's Statement 87, denied the charges.

"None of the comments we got from task force members or other constituents were ignored. We appreciated everything we got," he said.

The task force, made up of experts and interested parties, made recommendations to the FASB and reviewed the proposals.

"The FASB ignored the advice of its own task force," said Bernard Sacks, a task force member and a certified public accountant with OAO Corp. in Greenbelt, Md.

"It just went ahead and didn't listen," he said.

"The staff does what it wants to do and I think the task force was just a charade. The staff runs its own show and it takes the input from the task force. If it agrees, then fine; if not, then too bad," he said.

Mr. Sacks also questioned the way the FASB staff categorized the written comments on preliminary proposals as pro or con.

"My own view is that the final version differed greatly from what we discussed, and that is not to say it is wrong," he said. He added he would have voted against FASB Statement 87 had he had the opportunity.

In interviews with 19 of the 28

Goldman seeds LBO fund with $25 million

By Marci Baker

NEW YORK — Goldman, Sachs & Co. is launching a $250 million leveraged buy-out fund in which it will invest $25 million of its own capital.

This marks the first time Goldman's own money will be used to finance acquisitions and one of the few instances in which it will provide any form of discretionary asset management to investors.

Wall Street

In another leveraged buy-out development, Forstmann Little & Co. early this month began marketing its third and most ambitious management buy-out partnership. The firm is seeking $1 billion from pension funds and other institutional investors and reportedly has received informal commitments for as much as half of that.

Pension executives at General Electric Co., Stamford, Conn.; Texas Instruments Inc., Dallas; and Minnesota Mining & Manufacturing Co., St. Paul, are among those looking at investing in the

Continued on page 41

One New York City

ADRs

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* March indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	5.6	14.1	37.7
Russell 3000[1]	5.4	14.7	37.7
Ryan Index[2]	5.0	11.1	35.0
Shearson Lehman Gov't./Corp.[2]	3.5	8.5	28.9

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

SEC could weaken soft-dollar policies

By Joel Chernoff

WASHINGTON — The Securities and Exchange Commission next week may loosen the clamps on what research services money managers may purchase with soft dollars.

The interpretative release the commission will consider April 22 is looser than what SEC staffers previously said they wanted. It would allow the full use of such payments as long as the research aids the investment process. Such an interpretation eliminates a controversial test requiring the research product not be "commercially available."

The proposed interpretation also would cause managers to allocate costs between investment-related and administrative uses of such products, possibly creating bookkeeping complications.

If the SEC adopts the interpretation, it will have a limited direct effect on pension fund executives using soft dollars. They largely will face regulation by the Department of Labor, said Richard Wessel, associate director of the commission's division of market regulation.

Pension fund executives who hire outside money managers are not covered by the SEC interpretation because they do not exercise investment discretion, Mr. Wessel explained. Even if the fund runs money internally, he said the SEC rules are less likely to apply than the Employee Retirement Income Security Act.

The Labor Department will issue a release simultaneously with the SEC's effort, said Mort Klevan, deputy administrator of the Pension and Welfare Benefits Administration. "I don't think anybody who reads the Labor Department's requirements will be surprised," he said.

In recent months, department officials have emphasized that plan assets be used solely for the benefit of plan participants and beneficiaries, not for the gain of the plan sponsor.

For example, if a plan normally pays its master trustee fees from plan assets, soft dollars could be used instead. Where the fee is a legal obligation of the corporation, payment in soft dollars would be viewed as a prohibited transaction between the plan and a related party.

In addition, pension fund executives are expected to monitor their investment managers periodically to ensure they get best execution on trades and the amount of research bought with soft dollars is reasonable.

The SEC staff's recommendations relate to what qualifies as research under section 28(e) of the 1934 Securities Exchange Act. Under that rule, investment managers may direct trading to specific brokers, who then rebate a portion of the commissions in research services or products.

Thus, a manager might direct a portion of its brokerage business to a particular firm if it got, say, 50 cents in research services for each dollar in commissions paid. Pension fund executives, becoming wise to the use of directed commissions, increasingly have demanded a portion of the soft-dollar pie.

Part of the problem with the current interpretation of 28(e) is rapid technological advances in investment services have outdated earlier notions of what qualifies as research. For example, it is unclear whether computer hardware or computer time-sharing, which could be used for multiple purposes, is considered research by the SEC.

In addition, services such as quotation machines or certain periodicals are not considered research because they generally are available to the public.

The proposed interpretation would hew much closer to the law's original language, requiring research to be anything that "proves lawful" and provides appropriate assistance in the investment decisionmaking process. What's more, it would drop the "not commercially available" requirement.

While the details of the proposal were not available, industry experts favored the broad outlines of the revised interpretation.

"I think that's the way it should have been (all along)," said Robert Kittredge, general counsel for Loomis, Sayles & Co. Inc., Boston, and chairman of the Investment Counsel Association of America Inc., a New York-based industry group.

Keith J. Rudolf, partner and legal counsel for Stein, Roe & Farnham, Chicago, said, "I think it will clearly be an improvement."

Lee Pickard, partner in the Washington law firm of Pickard & Djinis and a former SEC official, said the new approach is "more realistic and it gives a better sense to the fiduciary to what he can or cannot do."

But the interpretation would substitute a new requirement that managers using the 28(e) exemption allocate the costs of

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12 Minnesota, PRIT advisers agree

Plans use incentive fees

By Chuck Paustian

Two large public retirement systems are placing 12 of their 18 existing equity investment managers, running a total of $1.15 billion in assets, on performance-based fees.

- Ten of the 11 active equity managers at the Minnesota State Board of Investment, St. Paul, will be on performance fees effective July 1, said Howard J. Bicker, executive director. The 10 invest a total of about $1 billion of the board's $8 billion in assets.
- Two of the seven active equity managers for the $1.2 billion Pension Reserve Investment Trust Fund, Boston, also will be under performance fees, said Daniel J. Kelly, director of program development for the fund. The two manage about $145 million.

The move by the two funds and others before them to performance fees might ease the way for corporate pension executives to establish similar arrangements with their funds' money managers.

Corporate pension funds are subject to the Employee Retirement Income Security Act, and must apply for an exemption from the Department of Labor before they can adopt performance-based fees.

The Labor Department, however, is expected to provide further guidance on the use of incentive fees by corporate plans later this year (*Pensions & Investment Age*, March 3).

Mr. Bicker said the Minnesota investment board, which oversees the investment of several pension plans for state and local public employees, decided to implement the fee arrangements so the performance risk was more equally dispersed.

"We think the risk of performance should be borne by both the manager and the plan sponsor. Right now it is borne only by the plan sponsor," he said.

Mr. Bicker would not disclose the names of the managers being placed on incentive fees.

Industry sources, however, said Alliance Capital Management Corp., IDS Advisory Group, Investment Advisors Inc. and Norwest Bank, all in Minneapolis; BMI Capital Corp., New York; Hellman, Jordan Management Co. Inc., Boston; and Waddell & Reed Asset Management Co., Kansas City, Mo., have agreed to the fees.

An official of Fred Alger Management Inc., New York, said the firm has had discussions with several clients regarding performance fees, but has not yet agreed to any of the arrangements.

Executives of Beutel Goodman Capital Management Ltd., Houston, and Forstmann-Leff Associates Inc., New York, would not comment. Executives at Lieber & Co., Harrison, N.Y. could not be reached for comment.

Mr. Bicker said the managers' fees will be determined by their performance relative to their normal portfolios.

A normal portfolio is a group of stocks the investment manager would select from when constructing a portfolio for the client. The normal portfolio serves as an investable alternative for a particular manager's style and allows the fund executive to determine the amount of value added by the manager.

"With performance-based fees, you have to have a bogey that is appropriate," said Mr. Bicker.

Under the terms of Minnesota's arrangement, a manager could receive a fee as high as 1% of assets managed if performance exceeded the normal portfolio by 1,000 basis points.

The manager would not receive any fee if he underperformed his normal portfolio by more than 600 basis points. The managers' investment objective is to outperform the normal portfolio by 200 basis points.

If the manager's performance equaled the investment objective, the manager would receive a base fee of 50 basis points.

(One hundred basis points equal one percentage point.)

Mr. Bicker said Minnesota's managers were generally receptive to performance fees, although a

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Corporations eye FASB 88

By Chuck Paustian

Corporate financial executives are showing increasing interest in a provision in the Financial Accounting Standards Board's Statement 88 allowing surplus pension assets to be recognized on the income statement without terminating the plan.

The statement, which permits the recognition of a portion of surplus assets after a like amount of the pension obligation has been satisfied through the purchase of annuities, eventually could lead to a decline in the number of plan terminations.

So far, Manufacturers Hanover Corp., New York, is the only corporation known to have used the provision.

Accountants and actuaries, however, said executives at many other companies may implement it in the near future.

What attracts them is the ability to boost earnings through the recognition of surplus pension assets without going through the rigors of terminating a defined benefit plan.

"You avoid all the governmental filings and everything else," said Robert B. Aglira, a principal of William M. Mercer-Meidinger Asset Planning Inc., Philadelphia.

Manufacturers Hanover, for example, purchased $125 million in annuities for its $550 million pension plan, according to Eugene M. McQuade, senior vice president and controller.

As a result, Manufacturers Hanover boosted its income (on its income statement) by $53 million for fiscal year 1985, ended Dec. 31 (*Pensions & Investment Age*, March 17).

But other companies aren't rushing to follow Manufacturers Hanover's lead. "Perhaps the biggest reason that companies might hesitate is (the purchase of annuities) represents a reinvestment of assets," Mr. Aglira said.

The corporate executives may be waiting for higher interest rates, which would result in lower purchase costs.

Annuities are "just another place for the plan to put the assets," said Rowland M. Davis, a principal of Towers, Perrin, Forster & Crosby, Chicago. "It's an investment decision," he said.

Mr. Davis also said the purchase of annuities may reduce some of the volatility in a company's pension expense.

In addition, a company first must recalculate its pension figures to determine the amount of surplus assets available. Before a company can implement Statement 88, it first must implement FASB statement 87, which

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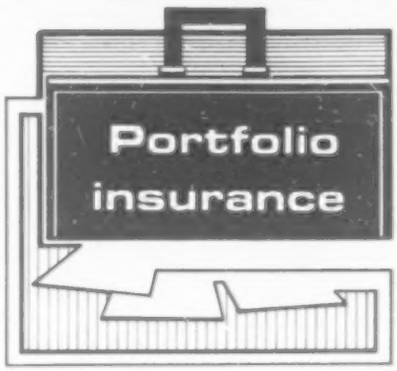
Dynamic hedging grows despite debate

By Trudy Ring



The amount of pension assets protected by dynamic hedging, also called portfolio insurance, has increased more than 40 times during the past two years — to at least $8.5 billion — but the product remains controversial.

The strategy involves the sale of stock index futures or fixed-income futures against a portfolio in reaction to a drop in financial markets, and sometimes buying them in reaction to rising markets. For most clients of Leland O'Brien Rubinstein Associates Inc., the leading dynamic hedging manager, futures would be sold when the value of the protected portfolio dropped 3%, said Hayne Leland, managing director of LOR. If the drop were temporary and the portfolio's value started moving up again, the futures would be bought back after a 3% move upward, he said.

Some clients do have different buy-sell timing criteria, and the criteria may be adjusted according to how fully invested the protected portfolios are, he said.

The program is designed to guarantee investors a minimum rate of return while allowing the capture of upside gains, less the cost of the protection.

It is not an insurance policy, but has come to be called portfolio insurance because of the assurance of a minimum return.

Generally, the manager implementing the dynamic hedging strategy will handle only the futures sales or purchases, without interfering with a pension fund's other managers.

The strategy has attracted many large corporate pension plan sponsors, such as Manville Corp. and Gates Corp., both of Denver, and Trans World Airlines Inc. and J.P. Stevens & Co., both of New York. Some public pension funds, such as that of the Southern California Rapid Transit District, Los Angeles, and at least one church fund — the New York-based Episcopal Church Pension Fund — also have adopted the strategy.

Executives of many other retirement funds are taking a look at it. "I think there may be some possibilities there," said Nathaniel Duffield, chairman of the profit-sharing committee at Halliburton Co., Duncan, Okla.

John Steinbach, assistant treasurer and investment manager at K mart Corp., Troy, Mich., said he would like to get his board's approval to put a dynamic hedging program in place during the current market cycle, if it lasts another couple of years, or else during the next bull market cycle.

"I think any locking in of profits for a pension fund is very prudent in this type of market," he said, adding K mart has used other means to lock up gains.

But enthusiasm for the product is not universal. Some pension executives have considered it and rejected it.

"We have not felt, as of now, that it's appropriate," said Howard Carlson, pension fund manager at Commonwealth Edison Co., Chicago. He said he finds it hard to believe the strategy will work the way it's supposed to.

Edward T. Tokar Jr., vice president-investments at Allied-Signal Inc., Morris Township, N.J., said he's always a bit skeptical of the latest hot investment — once, it was oil and gas; another time, small growth

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Benefit losses told

Effect of plan terminations studied

By Joel Chernoff
and Chuck Paustian

WASHINGTON — Plan participants suffer benefit losses when their terminated defined benefit plan is replaced with a defined contribution plan or is not replaced, but not when it is replaced with a defined benefit plan, preliminary findings of a study show.

Meanwhile, two companies, NL Industries Inc., New York, and Baker International Corp., Orange, Calif., announced their intention to terminate defined benefit plans and recapture a total of $220 million.

NL Industries will replace its terminated plan with another defined benefit plan, while Baker International intends to replace its plan with a defined contribution plan.

The Labor Department-funded study, which is expected to be completed by the April 15 meeting of a special task force on terminations of overfunded plans, is being performed by Hay/Huggins Co. Inc., Philadelphia.

The task force either will make recommendations or present a range of options to its parent body, the ERISA Advisory Council, a group of private-sector experts who advise the secretary of labor on benefit issues.

The council has postponed its meeting to vote on the task force's recommendations to May 14 and 15 (from April 30) to study the task force's advice.

T. Timothy Ryan Jr., the task force's chairman and a member of the advisory council, said the task force is considering maintaining the status quo, eliminating or changing the Reagan administration's May 1984 guidelines on asset reversions or permitting employers to retrieve surplus assets without terminating their plans.

One source said the task force is exploring requiring an employer that wants to withdraw excess assets without terminating to leave a cushion of 10% exceeding the level of accrued benefits, in addition to existing requirements of vesting all benefits and purchasing annuities for those benefits.

The preliminary findings of the Hay/Huggins study also show spinoff/terminations involve no benefit losses because participants automatically receive credit for past service.

In a spinoff/termination, a plan

T. Timothy Ryan Jr.

is divided into two, one for active employees and one for retired employees. Once annuities have been bought for the accrued benefits of active employees, the surplus assets are shuttled into the plan for retirees, which is then terminated, allowing the employer to recap[illegible] the excess.

Similarly, when the employer terminates the entire overfunded plan and replaces it with a similar plan, participants do not lose benefits in "the vast majority" of cases, Mr. Ryan said, because most successor plans provide past service benefits.

When no successor plan is provided, however, participants do suffer "substantial benefit losses," he said. Most of these cases involved business closings.

Where the original defined

Continued on page 43

Cash positions stable through first quarter

By Chuck Paustian

The cash positions of active equity managers were virtually unchanged during the first quarter of 1986.

The percentage of cash held by active equity managers in their portfolios dropped during the first quarter of 1986, but most of that decrease was attributable to the current bull market.

According to INDATA, an investment analysis service of Gordon, Haskett & Co., Southport, Conn., institutional equity portfolios finished the quarter with 6% cash, compared with 6.9% cash at the end of 1985. For the first quarter of 1985, equity portfolios finished with 6.3% in cash.

During the first quarter, the equity market, as measured by the Standard & Poor's 500 stock index, was up 14.1%.

"If you adjust for market values, it appears managers raised cash in 1985, and they have held steady in 1986 so far," said William T. Kennedy, partner in the Atlanta office of INDATA.

The INDATA statistics are based on a universe of 1,189 equity managers.

The cash reserves of managers tracked by *Pensions & Investment Age*, ranged from less than 5% (at Alliance Capital Management Corp., New York) to 25% (at First Chicago Investment Advisors, Chicago).

Managers interviewed apparently are cautious about the market; they said their cash reserves, as a percentage of the portfolio's assets, generally were at the same levels March 31 that they had been for the past several months.

Those reporting slightly lower cash figures attributed most of the decline to the equity market, while those with slightly higher cash reserves said the increase resulted from the inability to find properly valued stocks.

Jon Fossel, senior vice president of Alliance Capital, said the firm's cash position of a little less than 5% is about where it has been for "quite a while." At the end of the year, Alliance reported cash reserves at 5%.

"The only reason it would be less than 5% is because the value of stocks went up," he said.

"Our view is that the stock market in general is now fairly valued, not overvalued, relative to the

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Public funds move most money

By Trudy Ring

Large public pension funds were the major movers of money to new investment managers in the first quarter, reports in *Pensions & Investment Age* show.

Batterymarch Financial Management, Boston, and Citicorp Investment Management, New York, each received $500 million to manage from the $34 billion California Public Employees' Retirement System. These accounts, for equity management, made Batterymarch and Citicorp the hottest managers of the quarter in terms of assets gained from new clients.

The hottest — and coldest — managers were identified through reports published in *P&I Age*. Managers may have gained or lost other accounts that were not reported.

and Citicorp, they also hired Rosenberg Capital Management, San Francisco, as an equity manager. The amount to be allocated to Rosenberg was being negotiated.

Batterymarch is a contrarian manager, investing in stocks that are out of favor, while Citicorp and Rosenberg emphasize growth. The assets allocated to these firms had been run in-house.

Another California public fund, the $16 billion State Teachers' Retirement System, had major moves reported in the first quarter. It hired five managers to invest $100 million each in growth stocks of medium-capitalization companies.

The five are Denver Investment Advisors, Denver; Equitable Investment Management Corp., New York; Pilgrim, Baxter, Hoyt & Greig Capital Calif.; and Wright Investors' Service, Bridgeport, Conn. The teachers' system funded them from cash flow.

Wright had one other new account reported during the quarter — a $12.5 million equity account for the $300 million Bush Foundation, St. Paul, Minn.

Rounding out the top gainers were Wells Fargo Investment Advisors, San Francisco; Prudential Asset Management Co. Inc., Newark, N.J.; and Wilmington Trust Co., Wilmington, Del.

Wells Fargo had $200 million from four accounts, the largest being a $110 million bond index fund for the $1.3 billion Rockefeller Foundation, New York. Oppenheimer Capital Corp., New York, previously managed the money.

Also during the first quarter, it was reported the California billion, making the firm manager of a total of $4.5 billion for the system. The teachers' fund reported it had made that shift during the fourth quarter of 1985, so it was not counted in the first-quarter totals.

Prudential Asset Management's $121 million in new assets reportedly came from three clients. The biggest account was a $60 million guaranteed fixed-income portfolio for the $190 million Chemical New York Corp. profit-sharing plan. Most of the money came from the refunding of contracts with another carrier, whose name was not released.

Wilmington Trust won a $115 million fixed-income account for Kaiser Aluminum & Chemical Corp., Oakland, Calif. The $470 million Kaiser fund shifted to completely

Most new accounts*
1st quarter 1986

Firm	New accounts
Bankers Trust Co.	9
Neuberger & Berman	5
Dreman & Embry Inc.	4
The Boston Co.	4
Investment Advisers Inc.	4
Palmer Organization	4
Wells Fargo Invest. Advisors	4

* As reported in *Pensions & Investment Age*

Most new assets*
1st quarter 1986

Firm	($ mil.)
Batterymarch Financial Mgmt.	$500
Citicorp Investment Mgmt.	500
Wells Fargo Invest. Advisors	200
Prudential Asset Mgmt. Co.	121
Wilmington Trust Co.	115
Wright Investors' Service	113
Denver Investment Advisors	100
Equitable Investment Mgmt.	100
Pilgrim, Baxter, Hoyt & Greig	100
Provident Investment Counsel	100

Cash Management

Pepsi uncaps Euromarket

Several follow lead in commercial paper

By Richard J. Gillespie

Eastman Kodak Co., IBM Credit Corp., General Electric Co. and Upjohn Co. are following a lead taken by PepsiCo Inc. in issuing Eurocommercial paper.

PepsiCo recently set up a commercial paper operation on the Eurodollar market in which it offers to buy back any excess paper from its dealers to prevent them from creating a secondary market.

Furthermore, rather than issuing paper in a series of preset maturities, PepsiCo bids on an investor's needs, offering maturities from seven to 183 days, according to Peter Houchin, vice president with PepsiCo, Purchase, N.Y.

With the technique, PepsiCo essentially has managed to crack the market that had proved troublesome to earlier issuers. By early April, it had outstandings (the amount of an issue outstanding) of $225 million, and the paper was priced more aggressively than anything else on the market except for Canadian Export Corp., a supranational agency.

The technique is being widely copied by other U.S. issuers, most notably IBM Credit Corp., which already has begun posting rates.

"I think we started a trend," said Mr. Houchin. "The interesting thing to us is that we see some other programs coming to the market now, such as IBM Credit Corp., which are modeled after ours, and we are kind of excited about that."

U.S. corporations only recently began selling commercial paper directly onto the Eurodollar market, and some of the early entrants were surprised to find it could backfire, according to Mr. Houchin.

Because of conditions peculiar to the market, issuers sometimes found underwriters who had bid aggressively for the business later dumped the paper onto the secondary market, sometimes taking a loss and often interfering with the company's ability to issue on the primary market at favorable rates.

As a result, some major U.S. issuers — including most of those listed above — had eschewed the market.

"My feeling is that many of them felt why bother with Europe. Most of them had snubbed the market and said it is not there and evidently they now feel that they were wrong," said Mr. Houchin.

But while most corporations using PepsiCo's innovation now intend to list their paper on the Eurodollar market specifically to take advantage of the lower rates available, PepsiCo had another reason for the move, he said.

Not only is it developing its non-U.S. investor base, but by doing so, it hopes to guard against the possibility of saturating the U.S. domestic market.

As an added benefit, PepsiCo found it has garnered a lower borrowing cost through its Eurocommercial paper program.

On a typical day this month in Europe, PepsiCo was issuing paper seven basis points below what it was in the U.S. domestic market on an all-in basis (which included the dealer spread).

In Rochester, N.Y., Eastman Kodak spokesman Henry Kaska said the company was registering to issue directly onto the London Eurocommercial paper market.

But unlike PepsiCo, which generally intends to use its Eurocommercial paper facility as a supplement to its domestic operation, Eastman Kodak sees its program as an "either/or sort of thing," said Mr. Kaska.

"We view this program as an alternative to the U.S. commercial paper market and funds from the program will be used for regular working capital requirements."

Eastman Kodak, which first entered the U.S.

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Payden & Rygel index of short maturity assets*
(for year ended Dec. 31)

	December 1985	Quarter ended 12/31/85	Year 1985	12 months ended 12/31/85	Yield level monthly change*
	Unannualized total returns				
90-day					
U.S. Treasury bill	0.6551	1.8910	8.3071	8.3071	−11
Domestic CD	0.8981	2.0447	8.6089	8.6089	−13
Euro $ CD	0.7132	2.0712	8.7843	8.7843	−17
180-day					
U.S. Treasury bill	0.7361	1.9397	9.0851	9.0851	−18
Domestic CD	0.7260	2.0989	8.9470	8.9470	−16
Euro $ CD	0.7416	2.1525	9.2327	9.2327	−17
1-year					
U.S. Treasury note	0.9841	2.3533	10.3671	10.3671	−25
2-year					
U.S. Treasury note	0.5562	3.8000	13.3730	13.6730	−48

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. 90- and 180-day Treasury bill yield level changes on discount basis.
*Basis points.

Source: Payden & Rygel, Los Angeles

Because of a discrepancy between the publishing schedules of *Pensions & Investment Age* and Payden & Rygel, the year-end index results, shown here, were not printed in January. Managers should note, however, the matrix assumes there were no cash flow constraints imposed.

Companies review lockboxes in effort to lower expenses

By Chuck Paustian

Several companies are hoping to save hundreds of thousands of dollars annually through the consolidation of their lockbox operations.

A number of factors have contributed to the need for consolidation. Reorganization of corporate structures and spiraling banking costs have forced companies to look for ways to reduce overall expenses; lower interest rates have decreased the value of a single day's cash inflow, reducing the need to accelerate collections in order to maximize their investment potential; and the Federal Reserve Bank's High Dollar Group Sort program has accelerated the check-clearing process.

Among the companies recently completing studies of their lockbox operations are Marathon Oil Co., Findlay, Ohio, and Diamond Shamrock Corp., Dallas.

Combustion Engineering Inc., Stamford, Conn., already completed its consolidation efforts and reports saving about $300,000 to $500,000 annually.

"One of the main reasons companies are (consolidating) is simply because they want to lower expenses," said Shirley J. Gilmer, a vice president of RepublicBank Dallas.

Also, the decline in interest rates has reduced the need to accelerate the collection process as the potential return on investment has been lowered.

"One of the points of cash management is the time value of money and if the value of money is lower, you don't have to optimize it as much," said Ms. Gilmer.

"When you have something like what our present situation is . . . it's time to look at what your benefit is and what your cost is," said Chet L. Andrews, vice president at VALUTECH, a cash management service provider, Santa Ana, Calif.

"From an economic standpoint, the two key components that go into your equation (the cost of lockboxing vs. the benefits gained) have changed dramatically," said Cathy L. Rollins, a principal of Treasury Strategies Inc., Chicago.

Although corporations routinely review their lockbox operations every two to three years, the higher bank costs and lower benefits create the need to re-evaluate the lockbox system.

"That equation is no longer good because interest rates have changed so much," said Ms. Rollins.

Besides the economic reasons for consolidating a lockbox system, the Federal Reserve Bank's program and its improved technology also give cause for reviewing a company's operations.

Under the program, banks presented with more than $10 million from outside their district will receive a second presentation of items drawn on that bank from the Federal Reserve.

"The Fed did that with the idea they wanted to speed up the check-clearing process," said Larry Marks, president of Phoenix-Hecht, a cash management consulting firm in Northfield, Ill.

Roger L. Hawley, manager-domestic funds department at Marathon Oil, said all of these factors came into play when conducting a review of the company's lockbox network.

"We were aware that a lot of things have changed since we did our last study in 1982," said Mr. Hawley.

Marathon, with $10 billion in revenue during 1985, collects

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Cash notes

Monitoring starts

NEW YORK — March 27 came and went and the world didn't end.

That was the date the Federal Reserve began ex-post monitoring bank intraday overdrafts on FedWire and the Clearing House Interbank Payment System.

That things went smoothly came as no surprise. The assistant director of Federal Reserve Bank operations, Elliott McIntee, had predicted as much.

"At this point we have had no earthshaking things happen," said Susan Clark Shellington, assistant director of treasury services at Bell Atlantic Corp., Philadelphia, and chairman of the National Corporate Cash Management Association's Federal Reserve Liaison Committee.

According to Ms. Shellington, the NCCMA has scheduled a May 1 meeting with the Federal Reserve to go over the data for the program's first month.

According to a spokesman for the Federal Reserve Bank of New York, not only did the exercise go smoothly the first day, but indications were that institutions stayed within the voluntary caps.

It was more or less a typical day on FedWire, he said, with 89,500 transactions totaling about $370 billion.

On the CHIPS network, things also went smoothly although volumes were a little higher than usual at about $600 billion.

It was one of CHIPS' biggest days ever, according to John Lee, executive director, partly because it was at the end of the month and end of the quarter.

CHIPS operates on a computer system that monitors intraday overdraft positions as it goes along, he said. Caps are set on a daily basis and payments that

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Columbus Circle Investors Inc.

Disciplined Investment Management

15 Columbus Circle
New York, NY 10023 (212) 397-8763
Representative office:
440 South La Salle, One Financial Place, Ste. 2500
Chicago, IL 60605 (312) 294-5206

Leasing

An update on corporate leasing: a review of '85 and a look to '86

Deals still brewing despite tax threat

By Marci Baker

The threat of tax reform may be keeping some corporations and investors out of the leasing market, but for others it's business as usual.

Leasing industry participants note several major leasing transactions are in the works or on the drawing boards. They include:

- A roughly $50 million leveraged lease financing of two new Boeing planes for AirCal Inc., Los Angeles. The deal, just completed, was privately placed with two investors through Paine-Webber Inc., New York.
- The sale-leaseback of the state-of-the-art auto facility being built by Mazda Motor Corp., Flat Rock, Mich. The leveraged lease transaction reportedly totals $500 million. Co-agents are Goldman, Sachs & Co. and Sumitomo Bank of Japan. Officials of Mazda and Goldman declined to comment on the deal.
- A possible aircraft leasing transaction by Federal Express Co., Memphis, Tenn. The company expects to accept delivery of three new DC-10 freighters from McDonnell Douglas Corp., St. Louis, within six months. Although no decision has been made on the financing of the aircraft, a Federal Express official said the company is looking into a leasing transaction as well as direct purchase.
- The sale-leaseback, through Paine-Webber, of as much as one-half of El Paso Electric Co.'s $1.5 billion interest in Unit 2 of the Palo Verde nuclear power project near Phoenix, Ariz. El Paso Electric, El Paso, Texas, is following the lead of Public Service Co. of New Mexico, Albuquerque, which sold part of its interest in the project for $325 million late last year.
- The sale-leaseback of Public Service of New Mexico's remaining interests in Palo Verde. The utility is working with Kidder, Peabody & Co. and Goldman, Sachs on the nearly $600 million transactions.
- A quasi-asset-backed financing through the private markets involving farm equipment leases by Deutz-Allis Credit Corp., West Allis, Wis. The deal could total as much as $100 million and is being placed through First Boston Corp.

Most leasing transactions continue to rely on the sale of tax benefits to investors and are being structured under the assumption that they will be grandfathered under any new tax law Congress may pass.

"The market isn't grinding to a halt just because there's a tax bill out there," said Daniel Lief, vice president at Goldman, Sachs.

"People believe Congress will be reasonable as they have been historically and establish effective dates for tax changes that won't affect already completed transactions."

Also, structuring tax-sensitive deals under the cloud of tax reform is not new to lessors and lessees; Congress has been threatening repeal of the investment tax credit and other reform measures for several years now.

"Tax ramifications have become generic to the leasing business," said Robert Starnes, corporate manager-financial services at Public Service of New Mexico. It's routine to include provisions to adjust the terms of the deal in the event of tax law changes, he said.

That's the case in Public Service of New Mexico's sale-leaseback activities and likely will be so for El Paso Electric as well.

El Paso Electric wants to do a sale-leaseback for part of its 15.8% interest in Unit 2 of Palo Verde, which for tax purposes is scheduled to go into operation this month. The debt portion of the $500 million to $700 million transaction, which may also involve El Paso's interest in the nuclear project's common and switchyard facilities, is expected to be raised through the public markets.

The deal will have to close by midsummer or the utility will lose the ability to pass on tax benefits to investors in the deal, said William Royer, treasurer.

Mr. Royer couldn't comment on the

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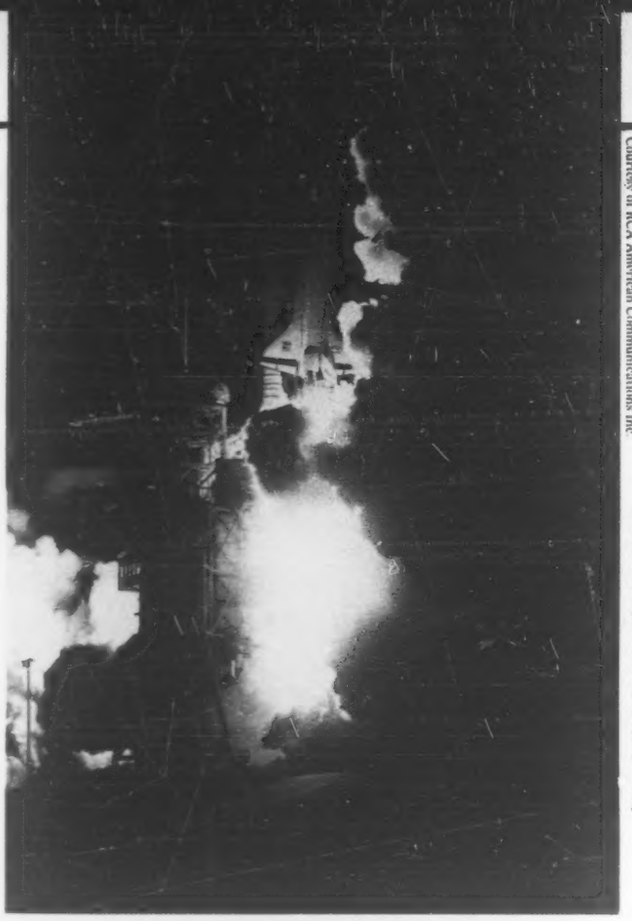


Courtesy of RCA American Communications Inc.

The space shuttle Atlantis, lifting off in November, ferried RCA Corp.'s leased Satcom K2 into orbit. RCA's $314 million sale-leaseback of the satellite was one of last year's 10 largest lease financings.

Sale-leaseback role seen in utilities' debt refunding

By Marci Baker

Some utilities will refund existing high-coupon debt at par during 1986, analysts and investment bankers say.

Analysts estimate as much as $10 billion in high-coupon debt could be refunded by utilities this year if interest rates remain constant or decline.

At least some utilities are expected to substantially cut their interest costs by taking advantage of loopholes in their old bond covenants and forcing investors to turn in those premium bonds at par rather than at general redemption prices. And sale-leasebacks could be the mechanism for calling the bonds.

The spotlight has centered lately on special par call provisions relating to utilities' maintenance and replacement funds, which ensure a utility has enough reserves set aside to maintain operating plants.

But special "released property" provisions, frequently part of the terms of utility bond issues, may invite par calls of premium bonds as well, said Daniel Scotto, a utility analyst at L.F. Rothschild, Unterberg, Towbin, New York.

These provisions either require or give utilities the option to redeem high-coupon bonds at par with proceeds from property released from mortgages as a result of sale-leasebacks or other forms of asset sales.

More than 90 of 115 utilities carrying premium bonds on their books have issues with released property provisions allowing par calls, according to an 800-page electric utility bond redemption survey put together by Mr. Scotto. Generally those provisions leave the decision on par calls of premium bonds up to the utility, with mandatory par calls coming into play under specific circumstances such as a sale of assets to government entities.

The refunding risks tied to released property provisions from property sales haven't received much attention because the transactions are difficult to track and less visible.

"Utilities are constantly selling property, but the transactions are frequently small in size," making information difficult to obtain, Mr. Scotto said. "There hasn't been a major asset sale done to bring attention to the released property issue yet."

But that could change with the recent surge in large sale-leasebacks of utility power plants. In recent months, Tucson Electric Power Co., Tucson, Ariz.; Basin Electric Power Cooperative, Bismarck, N.D.;

Continued on page 34

Top 10 lease transactions of '85 total $4.1 billion

By Barry B. Burr

The 10 largest lease deals of 1985 accounted for almost a third of the $12.3 billion in privately placed equipment or plant leases arranged during the year.

The 10 largest deals totaled nearly $4.1 billion, according to IDD Information Services Inc., New York. That amount signals the leasing transactions' significance as a corporate finance tool, often individually rivaling in size many of the largest single debt and equity offerings in 1985.

Most of the biggest leases were by electric utilities and were initiated to transfer millions of dollars of underutilized tax benefits. Because of low earnings, the utilities, like many other lessees, couldn't take full advantage of the investment tax credit and accelerated depreciation benefits of owning. So they sold their interest in particular plants to companies that could, thereby lowering the cost of capital.

But tax change proposals in Congress are putting the tax-driven deals in jeopardy. Congress is likely to end the investment tax credit, which usually amounts to an immediate government subsidy of 10% of the cost of the equipment or plant through a tax credit.

A few of last year's biggest deals, however, were sale-leasebacks done mainly to enable the companies to record huge gains by selling assets worth more than the value reflected on the balance sheet.

The benefits of leasing are huge, both for lessees and lessors. Lessors gain tax benefits and pass part of them on to lessees in the form of lower financing costs.

General Electric Credit Corp., Stamford, Conn., a unit of General Electric Co., Fairfield, Conn., received an immediate $35 million in after-tax benefits for 1985 from its purchase of a cogeneration electric- and steam-producing plant from Cogen Lyondell Inc., Houston, a unit of PSE Inc., a Houston-based firm specializing in building cogenerating plants.

James H. Ozanne, GECC senior vice president, confirmed the $35 million first-year benefits, which amount to nearly half the $80 million GECC put up in equity to finance its purchase of the cogeneration plant, fueled by natural gas. The other $142 million was financed in debt from a group of banks.

By investing in the plant, GECC received for 1985 $18 million for taking an 8% investment tax credit on the $232 million plant and another roughly $17 million in an accelerated 15% depreciation.

PSE saved about two percentage points in its implicit interest cost by having its unit lease instead of borrowing to own, estimates Charles O. Svenson, senior vice president, Donaldson Lufkin Jenrette Securities Corp., New York, PSE's agent which arranged the lease financing.

Among the biggest deals of 1985 were the Springerville coal plant, Tucson Electric Power Co., Tucson, Ariz., agreed to sell for $850 million to $900 million and lease it back and the Spacenet 3 satellite transponder, GTE Corp., Stamford, Conn., agreed to sell for $248.4 million and lease it back.

The Springerville plant, whose lease arrangement is subject to state regulatory approval, isn't expected to begin operations until 1989. The GTE satellite was lost when an unmanned Ariane rocket carrying it into orbit malfunctioned and was destroyed shortly after launch in Kourou, French Guiana.

"A lessee can lease about anything" nowadays, said Buell T. Adams, treasurer, CBI Industries Inc., Oak Brook, Ill.

At the close of last year, a CBI unit, Liquid Carbonic Corp., sold an air separation plant expected to be completed in November in LaPorte, Ind., for $18 million to

Continued on page 35

Tax sensitivity avoided

Operating-lease, service-oriented programs selected

By Marci Baker

Leasing companies are intensifying efforts to move into less tax-sensitive markets to protect their businesses against potential changes in the tax laws.

Increasingly, lessors have been turning to the operating lease business or service-oriented vendor programs, which rely less on investment tax credits or accelerated depreciation and more on remarketing prowess and service-oriented relationships to achieve full returns on their investments.

They also are scouting out new markets where leasing activities hold out the potential for high yields without tax benefits.

In operating leasing, the investment return is more dependent upon the residual value of the equipment at the end of the lease than upon tax advantages arising from the lease. Operating leases generally are shorter than tax-advantaged ones, and are riskier because of the uncertainty about the future value of the equipment.

Although lessors continue to participate in such traditional, tax-oriented transactions as leveraged leases, those transactions are making up increasingly smaller portions of portfolios.

In 1985, tax-sensitive transactions made up slightly less than 50% of the transportation and industrial financing division's leasing activities at General Electric Credit Corp., Stamford, Conn. About 15% of its business in the first quarter of 1986 has been tax-sensitive, said James Ozanne, senior vice president and general manager of the transportation and industrial financing division at GECC.

The division focuses on large-scale equipment leasing, including aircraft, power generation stations and rail cars.

Likewise, John Hancock Leasing Corp., Boston, has flip-flopped its leasing portfolio since 1983, with tax-oriented leasing rep
senting between 10% and 1
down from as much as 90%
1983.

Equitable Life Leasing Co
New York, wants 50% of its le
ing volume to represent less t
oriented operating leases. T
activity was running at 42% of
lessor's sales in the first quarte
this year, up from only 8%
1983.

"We've been moving away fr
tax-oriented products since 19
said Daniel Hale, senior vice p
ident in charge of commercial
nancing at GECC. "Tax unc
tainty in the leasing business
existed every year since then. L
sors that want to remain comp
tive have been modifying (th
businesses) to focus more on
tax-sensitive kinds of products
a couple of years now."

GECC's commercial gro
focuses on middle-market leas
of such equipment as comput
and other high-technology equ
ment and trucks and trailers.
key area is vendor programs.

Whereas in traditional leasin
lessor such as GECC is largel
passive source of financing,
vendor programs the lessor
more active relationships w
both manufacturer and lessee.

GECC, for example, may l
equipment leased to customers
manufacturers and receive
rental payments on the short-t
leases. But in addition, it a
value to its investment by work
with manufacturers in their sa
training or equipment remark
ing, said Mr. Hale.

GECC has been building t
relationship-oriented business
part through acquisition. L
year, it purchased Decimus Co
which services and remark
computer and other high-techn
ogy equipment. The previous y
the company acquired Kerr Le
ing & Fleet Services Co. in effo
to expand its truck and hea
equipment leasing business.

GECC's transportation a
industrial financing group, me
while, has been moving m
heavily into the operating as
business. In line with that,
company is acquiring for $4
million the rail cars and as
ciated operating leases of No
American Car Corp., Chicago.

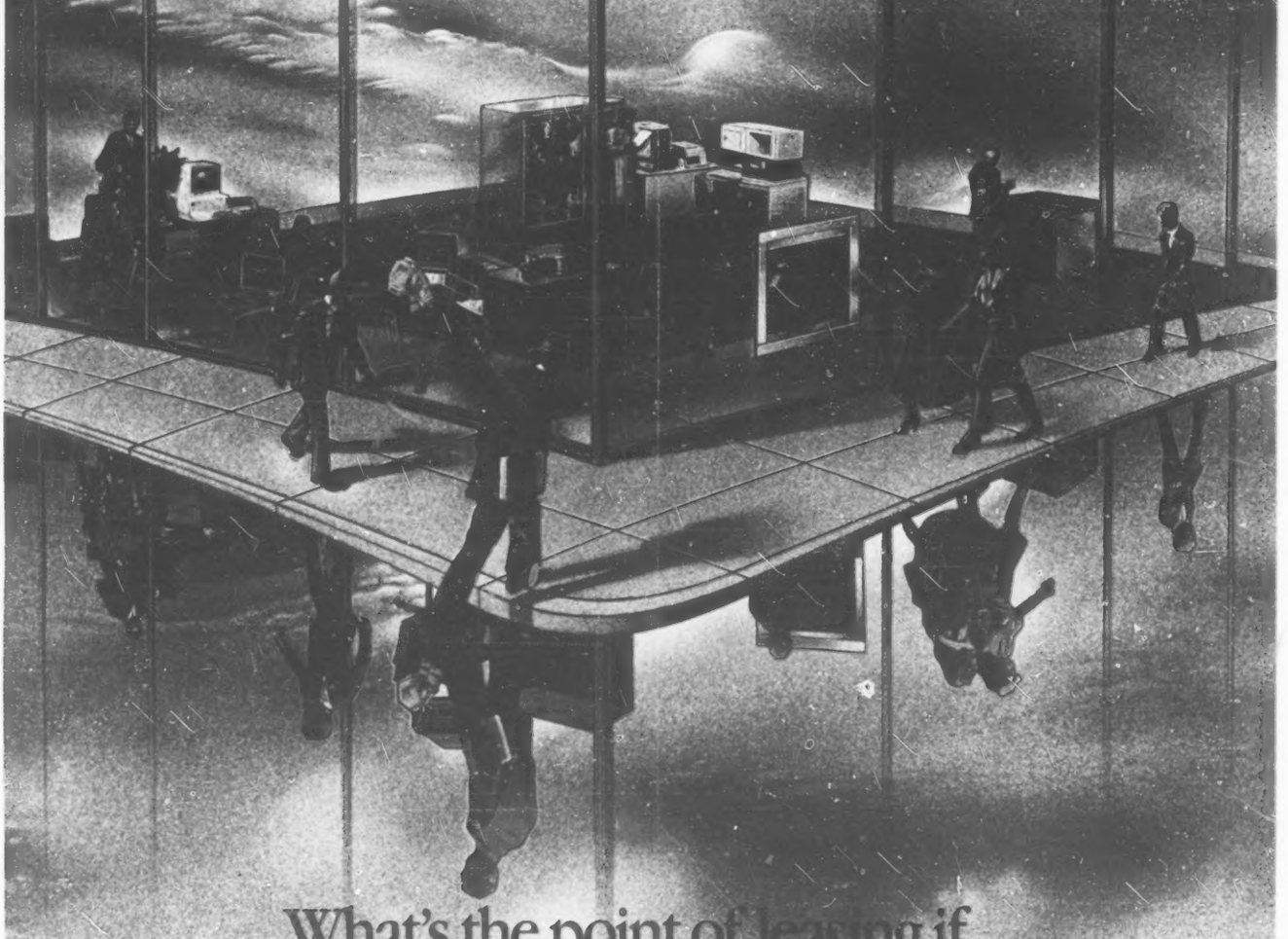
Moreover, the unit has be
shifting its emphasis on big-tic
financing activities from being
lessor, or equity participant,
leveraged lease-related deals
participating as an investor in
debt portion of transaction.
example, in the marine transp
arena, GECC last year redirec
its mix of new financing busin
from 80% in leasing to 75%
asset-based lending.

"We're still going after every
of traditional leasing business
can," said Mr. Ozanne. "But w
also preparing ourselves for
reform."

The operating lease business
pears to be generating the m
interest among lessors. T
shorter-term leasing transacti
have had their greatest appli
tion in high technology, wh
users are reluctant to buy equ
ment because new developme
quickly make older produ
obsolete.

The operating lease format a
can be used to finance the acqu
tion of major industrial equ
ment such as rail cars or aircraf

In these shorter-term leas
transactions, anywhere from 2
to 80% of the lessor's investmen
wrapped up in the residual va
of the equipment, whereas less
get back closer to all of the cos
equipment through rental p



What's the point of leasing if it mirrors the pitfalls of purchasing?

Here's the dilemma: Leasing is supposed to help you remain competitive by putting state-of-the-art equipment in your hands. And taking it off your hands as it becomes obsolete.

Yet, technology is moving so fast these days that you're likely to wind up with outdated equipment in the middle of a lease. In effect, you're apt to get stuck with (and stuck paying for) unproductive assets just as though you were purchasing them.

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Sale-leaseback . . .

Continued from page 31

Public Service of New Mexico, Albuquerque; and Montana Power Co., Butte, have sold new power generating stations to investors, who are leasing them back.

El Paso Electric Co., El Paso, Texas, is working on a sale-leaseback deal involving some of its interest in the Palo Verde nuclear power project near Phoenix.

Investment bankers say other utilities are eyeing the advantages of sale-leasebacks in an environment of overcapacity, increased competition and rate-sensitive public service commissions.

The deals enable utilities to avoid huge rate increases to consumers and reduce revenue requirements in the early years of a new plant's operation. In addition, sale-leasebacks put cash on the balance sheet and lower the cost of senior debt.

The opportunity for par calls on debt through released property provisions could make a sale-leaseback even more attractive.

"Historically, sale-leasebacks have been done largely to refund high-coupon debt," said Bruce Walenczyk, vice president at Kidder, Peabody & Co., New York. "I think in most transactions, the covenants on existing debt provide for call provisions at a premium."

Mr. Scotto indicated those provisions associated with the high-coupon debt of El Paso Electric would appear to make the utility eligible for released property redemption. William Royer, El Paso's treasurer, said the utility hasn't determined whether proceeds from the sale-leaseback will be used to redeem existing bonds or for other corporate purposes.

El Paso Electric, like others, likely would weigh its options carefully, because par calls typically invite investors' wrath.

If investor relations is one problem utilities would face in invoking released property provisions, another is determining whether they are even eligible for refunding debt at par with sale-leaseback proceeds. In most cases, the wording is hazy and would require a legal judgment on whether the utility qualifies.

For example, El Paso's released property provisions states proceeds from the "sale, taking or release of substantially all of the bondable property can be used to call bonds at par at anytime," according to the Rothschild report.

"'Substantially all of the property' — I'm not sure I know what that means," Mr. Royer said.

Some observers think public utility commissions — reluctant to approve electric rates increases — could pressure utilities to invoke released property provisions if a sale-leaseback appears to make them eligible for par redemption of high-coupon debt.

"I don't think there are many instances where the provisions would apply," said one banker. "But for those instances where they would, the rate boards would encourage utilities to do (a par call). The question is whether utilities could avoid doing the transaction." ■

Operating . . .

Continued from page 32

competition in what has become a very crowded market.

"Some of the new players that have come into the market in the last few years won't want to stick around," said GECC's Mr. Hale.

Many financing arms of industrial companies have been established predominantly as a means of sheltering income. Without the investment tax credit and other tax benefits, these operations will have little incentive to continue in the leasing business, lessors said.

The merger and acquisition wave may help fuel a shakeout as well.

The leveraged buy-out of Beatrice Cos., Chicago, for example, has effectively put its leasing subsidiary, Beatrice Financial Services, out of business. An official there said the subsidiary is not making any new leasing deals. The firm had been an investor in such leveraged lease transactions as the Basin Electric Power Corp.'s sale-leaseback of its Antelope Valley power station.

Instead, Beatrice officials will be focusing on paring the $6 billion to $7 billion of debt it has raised to finance the buy-out and on restructuring the company through asset sales. The restructuring potentially could include the sale of the financial services arm. ■

Goldman, PaineWebber top list

NEW YORK — Goldman, Sachs & Co. and PaineWebber Inc. together handled more than 40% of the $12.5 billion in privately placed equipment or plant leases done last year.

According to IDD Information Services Inc., New York, the two managers led the others in leasing placements by a wide margin.

As the accompanying chart shows, Goldman, Sachs ranked first, followed closely by PaineWebber. Shearson Lehman Brothers Inc. trailed far behind in third place.

The managers represent lessees, such as airlines, electric utilities and communications firms, seeking to lease their operating plant or equipment instead of owning it. The managers help find investors interested in becoming lessors, structure financing and place the debt and equity portions of the deals.

A comparable figure for 1984 wasn't available, although IDD estimates leasing placements for 1984 totaled at least $5.6 billion.

Top 10 managers'[1] 1985 lease-related private placements

Manager	Amount ($ mils.)	Market share[2] %	No. of issues
Goldman, Sachs	$2959.1	23.6	19
PaineWebber	2,444.8	19.5	35
Shearson Lehman	1,005.0	8.0	53
First Boston	961.1	7.7	28
Salomon Brothers	952.7	7.6	13
Merrill Lynch	932.9	7.5	18
Citicorp	826.1	6.6	27
Bankers Trust	731.4	5.8	19
1st Chicago Leasing	580.3	4.6	11
Bank of America	413.6	3.3	110

[1] Full credit given to each manager.
[2] Total market was $12.5 billion.
Source: IDD Information Services, New York

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Whichever way the wind blows in leveraged leasing, you can count on Bankers Trust to remain consistently innovative. And consistently a leader.

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U.S. tax proposals . . .

Continued from page 1

Buell T. Adams, treasurer of CBI Industries Inc., Oak Brook, Ill., whose Liquid Carbonic Corp. unit leased its first air separation plant last year, agreed the pending bills will have the biggest general impact on leasing. If the changes are enacted, "leasing will be less attractive to lessors and the cost of leasing is going up," he said.

"I think (the legislation) could have a significant effect," said Franklyn A. Caine, staff vice president and assistant treasurer, RCA Corp., New York, which leases some of its satellites.

But while it's expected to reduce leasing, it won't kill it.

"Under most proposals in Washington, leasing still represents an attractive form of financing for us," Mr. Caine added.

Fear of the bills already apparently has curtailed a lot of tax-driven leasing this year. "There is a definite slowdown in equipment acquisition because of the uncertainty of the tax bill," said Michael Fleming, president, American Association of Equipment Lessors, Arlington, Va., a trade and lobby group.

At Bankers Trust Co., New York, Charles J. Hill, senior vice president, said, "There are only a few transactions in the marketplace right now. Those that are being done are the lower-quality deals."

John L. Steffan, partner, Price Waterhouse & Co., Chicago, was less sure about the pending legislation's impact on leasing. "I think it has slowed down some deals because of the uncertainty . . . But I haven't seen any great effect," Mr. Steffan said.

The expected slowdown depends on when the tax bill would take effect. A bill isn't expected to be enacted until perhaps fall, but the repeal of the investment tax credit could be retroactive to March 1.

Everyone is banking on it not being retroactive to 1985.

Daniel Lief, vice president, Goldman, Sachs & Co., New York, expects the second half of 1986 to be extremely busy in leasing as firms try to conclude deals before the anticipated effective tax date.

But airline leasing may continue to boom.

Edward L. Jensen, assistant general manager, Federal Express Aviation Services Inc., Memphis, Tenn., a Federal Express Corp. unit, expects the airline leasing business to stay healthy.

The Federal Express unit is a consultant to banks and other investors that own, but don't operate, aircraft.

"Aircraft leasing is alive, strong and very healthy," Mr. Jensen said.

He said aircraft leasing dropped briefly late last year as concern mounted about an end of investment tax credits and accelerated depreciation, but quickly picked up.

Federal Express, which leases few of its aircraft, leased three last fall and is considering leasing three more it expects to take delivery on this year from McDonnell Douglas Corp. Mr. Jensen said the aircraft industry leasing pace is ahead of last year.

At International Lease Finance Corp., Beverly Hills, Calif., which specializes in aircraft leasing, Louis L. Gonda, director, doubts tax reform will affect his business.

Despite the growth in the airline industry, the general drop in leasing is having a major effect on capital formation, not just leasing as an alternative financing to owning, argued Mr. Fleming of the American Association of Equipment Lessors.

Ron C. Connolly, executive vice president, Connell Finance Co., West Field, N.J., estimates the implicit interest rate for leasing, now generally 5.1%, would rise to 7.7% under the Senate bill and 9.5% under the House version.

The expected slowdown comes, ironically, as leasing was having its biggest growth.

"Leasing is the largest form of capital formation other than retained earnings," said Geoffrey L. Stringer, president, First Chicago Leasing Corp., a unit of First Chicago Corp. that specializes in so-called big equipment leasing deals of $20 million or more.

Mr. Fleming's association estimates new equipment leases totaled $93.7 billion last year, up from $74.4 billion in 1984. The figures include all types of equipment, regardless of value, much of which isn't leased for tax reasons and probably won't be affected by the pending legislation, according to leasing industry executives.

The so-called big-ticket privately placed equipment leases, valued at $20 million or more, totaled nearly $12.4 billion last year, according to IDD Information Services Inc., New York. A comparable figure for 1984 wasn't available, although IDD estimates leasing placements for that year totaled at least $5.6 billion.

The pending tax bills would affect mostly these large lease transactions.

"These (top-market equipment leases) are almost always done for tax reasons," said Price Waterhouse's Mr. Steffan.

"A lot of people think of leasing as an alternative form of financing, as if it's a secondary form," First Chicago's Mr. Springer said.

"For certain kinds of companies, it's a primary form of financing," because firms can lower their cost of capital by leasing and transferring tax benefits, instead of buying.

"A lot of leasing is done to shift tax benefits from one party (that can't use them) to another (that can)," Mr. Steffan agreed. "The new bills would make tax benefits less lucrative."

Steel firms generally have been leasing equipment recently "because they aren't in a tax-paying position and can't use the tax benefits," said Daryl R. Leehaug, group vice president, Duff & Phelps Inc., Chicago.

They would be among the hardest hit, Mr. Fleming predicted.

As the accompanying chart shows, manufacturing firms accounted for $3.1 billion of the privately placed equipment leases last year, according to IDD.

Utilities were next, with $2.6 billion; natural resource firms, $1.5 billion; and transportation companies, $1.3 billion.

But companies also lease for reasons other than taxes.

"Leasing will still be an ongoing viable business," said First Boston's Mr. Sun. "There are a lot of nice things that go along with leasing," such as being a method of off-balance sheet financing.

Firms commonly lease mainframe computers — even though the cost of buying is often cheaper — to avoid the risk of technological obsolescence, said John J. Vosicky, vice president and treasurer, Comdisco Inc., Rosemont, Ill. Comdisco is the second biggest lessor of mainframes and other computer-related equipment behind IBM Corp.'s own leasing unit.

As he put it, "The value of computer equipment can only go one way — down."

Comdisco deals primarily with Fortune 500 companies; a typical Comdisco lease financing totals $13 million, he said.

He said legislation, while it might not affect lessees, could affect Comdisco's earnings and operations because it uses tax benefits to offset its tax, transferring to other firms those benefits it can't use.

At Goldman, Sachs & Co., New York, David George, partner, said much of its business has been more depreciation-oriented than investment tax credit-oriented. "So those deals would still get done" if, as hoped, the Senate wins over the House in keeping depreciation schedules generous.

Goldman, Sachs handled nearly $3 billion, or 25%, of the privately placed lease financings last year, according to IDD.

Federal Express' Mr. Jensen said the loss of tax benefits might raise the cost of aircraft leasing, but airlines have other lures to leases: to avoid the huge capital outlays; to avoid technological obsolescence; and sales incentives by lessors like McDonnell Douglas' leasing unit.

An idea behind the tax bill is to level the effective income tax corporations pay. Current law offers such benefits as investment tax credits and accelerated depreciation to favor capital-intensive corporations over service firms and other non-capital equipment companies.

Because of the tax benefits, profitable capital-intensive firms can use the tax benefits to lower their effective tax rate below the current general corporate income tax rate of 46%.

The pending bills propose a new corporate rate of 36%. But leasing industry executives argue the proposed rate isn't low enough to offset the loss of such benefits as the investment tax credit. They contend capital investment costs would rise, discouraging industrial expansion and harming job growth and the economy.

Leasing industry executives argue their lobbying isn't selfishly motivated. Because none of the pending legislation is aimed specifically at leasing, they contend the consequence wouldn't be a matter of a firm choosing to buy instead of lease, but whether to invest at all in new capital equipment.

At the American Association of Equipment Lessors, Mr. Fleming said, "We are strongly in favor of the retention of the ITC because of its tremendous incentive to acquire equipment" whether it's leased or bought. ■

1985 lease-related private placements

Industry	Amount ($ mils.)	No. of issues
Manufacturing	$3,136.3	110
Utilities	2,641.6	26
Natural resources	1,446.2	36
Transportation	1,313.7	54
Financial	1,157.1	36
Service	1,068.3	53
Rail/shipping	254.4	11
Retail	78.7	16
Unregulated telephone	20.9	2
Health care	8.2	5
Other*	1,239.2	44
Total 1985	**12,364.6**	**393**
Total 1984	**5,595.7**	**169**

* Includes agency deals and transactions where lessee is unknown.

Source: IDD Information Services, New York

Deals still brew . . .

Continued from page 31

structure of the transaction because it still is being developed. "We haven't gotten very far. Some equity investors have been contacted, but we haven't done any formal proposals as yet," he said.

The success of Public Service of New Mexico's first sale-leaseback was a catalyst in El Paso's decision to go ahead with its deal.

Public Service of New Mexico sold 72% of its 10.2% stake in Palo Verde Unit 1 to Chrysler Capital Corp., Detroit; Drexel Burnham Leasing, New York; and Mellon Financial Services, Pittsburgh. They, in turn, are leasing the facility back to the utility.

The investors financed the deal with about $70 million in equity and $255 million in debt.

Through the sale-leaseback, Public Service of New Mexico reduced to $40 million the amount of revenue it has to generate from consumers in the first year of the unit's operation to get a full return on its investment in the plant, said Martin Clifton, corporate vice president-financial planning. That represented a 50% drop in its first-year revenue requirement had the utility continued to own all the unit. Over the 40-year life of the project, nominal savings to consumers should reach $372 million, Mr. Clifton added.

At the same time, proceeds from the sale-leaseback will enable the utility to reduce its debt exposure and interest expense. Up to $250 million of the proceeds have been earmarked for redeeming retiring outstanding bonds, Mr. Clifton said.

The utility's second sale-leaseback to investors of its 10.2% interest in Palo Verde Unit 2 is expected to generate nominal savings of $535 million over that unit's 40-year life, he added.

The $450 million deal will be structured similar to the utility's first transaction. Plans are to complete within 90 days after the nuclear facility goes into operation this month to ensure that investment tax credits can be sold to investors.

Mr. Clifton said the utility missed the 90-day deadline in structuring the first deal. As a result, the tax credits couldn't be passed to the three lessors.

In addition, the utility is hoping to complete the sale and leaseback of its remaining $125 million stake in Palo Verde's first unit by midsummer. The New Mexico utility's Mr. Starnes said his company has applied to the state's Public Service Commission for permission to sell that stake to an existing subsidiary, Sunbelt Mining Co.

In the meantime, Public Service of New Mexico is working with Kidder on a roughly $350 million public offering of debt due to come to market sometime in the second quarter.

The lion's share of the offering's proceeds will go to refund the $255 million debt portion of the sale-leaseback completed last year, said Bruce Walenczyk, vice president at Kidder. The remainder will provide the leveraged portion of $125 million sale-leaseback under way now.

Plans on the initial sale-leaseback were to fund the debt portion of the deal with a public offering of serial bonds with maturities ranging from one to 29.5 years. The offering's structure was designed to take advantage of the steep yield curve existing at the time and provide a lower blended interest rate to the lessors, Mr Walenczyk said.

To avoid registration delays, the participants opted for interim debt financing to get the deal done by year end, he said. Since then, the yield curve has flattened out, making the public offering's original structure less appealing.

"We don't know how we'll structure the offering now," Mr. Walenczyk said. "That will be a function of market conditions when we're ready to do the deal."

Plans are to fund the leveraged portion of the $450 million sale-leaseback for Public Service of New Mexico's interest in the second unit through a public debt offering as well. The debt portion should account for about 80% of sale price.

While the largest deals now in the market represent sale-leasebacks of utility and manufacturing plants, investors also are showing interest in other types of equipment leasing transactions.

Deutz-Allis Credit, a captive finance subsidiary of Deutz-Allis, is nearing completion of its second quasi-asset-backed lease deal as part of the company's efforts to offer attractive financing of farm equipment to the farming community.

Deutz-Allis, a manufacturer and importer of tractors and other farm machinery, recently tested

Continued on page 36

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Top 10 lease . . .

Continued from page 31

GATX Corp., Chicago, and leased it back. It was the first time it leased such a plant rather than own it, he said.

Like other lessees, Mr. Adams said CBI's Liquid Carbonic unit chose to lease because CBI isn't paying taxes and was unable to use the tax benefits derived from the investment tax credit and speedier depreciation.

By selling the plant, "we can sell the ITC and depreciation to someone who can use it," he said. In addition, he said CBI was looking for a source of off-balance sheet financing to avoid nearing a debt-load restriction imposed by loan covenants. The 15-year operating lease appears in CBI's financial statements only as a footnote.

By leasing instead of borrowing to buy, Mr. Adams estimates CBI's implicit interest charge at 5% instead of 8%.

Though it wasn't among the biggest privately placed leases of the year, Mr. Adams said the Liquid Carbonic lease exemplified the notion that leasing can finance anything, rather than traditionally leased generic, transportable assets.

Typically, in a sale-leaseback, about 20% to 30% is financed with equity and the rest with debt. The firm or group of firms wanting the tax benefits buys the equity part, while debt is financed by other parties, with recourse in the event of a default to the equipment or plant rather than to the lessor.

Among 1985's biggest leasing deals:

• Tucson Electric's lease deal technically was the biggest of the year, though the transaction is subject to approval of Arizona regulators. Financing was arranged for $900 million, but the utility expects the final figure to come to $850 million after construction is completed in 1989.

Units of IBM Corp., Armonk, N.Y.; Philip Morris Inc., New York; and Emerson Electric Co., St. Louis, bought the equity part of the deal.

• The sale by Deseret Generation & Transmission Cooperative, Sandy, Utah, of its 44% interest in the Bonanza power station for $644.8 million was the second biggest leasing deal of the year. Shell Leasing Corp., a unit of Shell Oil Co., Houston, was the sole equity investor, paying about $306 million. The rest of the financing for the Bonanza plant, near Vernal, Utah, came from the public sale of bonds.

A public offering for debt "is relatively unusual," said J. Scott McGrane, first vice president, PaineWebber Inc., Deseret's coagent which arranged financing with Salomon Brothers Inc. "It's the third time that's happened for an electric utility generating station."

• Oglethorpe Power Corp., Atlanta, recorded a $79 million gain when it sold its 60% interest in the Scherer coal-fired Unit 2 generating plant for $395 million four investors, said Greg Jones, media relations representative. The four investors are Chrysler Financial Corp., Detroit; Ford Motor Credit Co., Dearborn, Mich.; HEI Investment Co., Houston; and IBM Credit Corp., Stamford, Conn.

Besides the profit, he said Oglethorpe, a taxable cooperative that supplies power to other Georgia electric cooperatives, chose to lease because its earnings were too small to take full advantage of tax benefits of owning.

Mr. Jones said Oglethorpe estimates it reduced its implicit interest cost by leasing instead of borrowing to own by three percentage points, to 8%.

He said Oglethorpe used $362 million of the proceeds of the sale to pay off a Rural Electrification Administration 11% guaranteed loan from the Federal Financing Bank to build the plant near Macon, Ga., which went into service in February 1984.

The rest of the proceeds are being used to pay capital gains tax on the sale and other costs associated with the lease financing, he added.

• Portland General Electric Co., Portland, Ore., recorded an immediate $100 million gain when its Fale Safe Inc. unit sold its Boardman generating station in Boardman, Ore., for $233 million, according to Lindsay A. McManus, vice president, First Boston Corp., New York. First Boston was Portland General's agent and arranged the lease financing.

General Electric Credit bought the plant and leased it back to the Portland utility. GECC provided $44.6 million for the equity part of the financing, while First Boston sold the debt to other groups.

• Santa Fe International Corp., Alhambra, Calif., sold and leased back for 22 years a geothermal plant, fueled by geysers, north of San Francisco. The plant was sold for $210.5 million. Tri-Continental Leasing Corp., Paramus, N.J., a unit of Bell Atlantic Corp., Philadelphia, bought the plant, putting up $66.5 million in equity, while the $154 million in debt was financed through three private offerings.

Pacific Gas & Electric Co., San Francisco, has a contract to buy the power produced by the 80 megawatt plant for a few years beyond the life of the lease.

• RCA Corp., New York, will receive an undisclosed gain from selling its Satcom K-2 satellite in a $314 million leveraged lease financing to a group of five utilities, the equity participants. They put up $62.7 million, while a group of RCA's banks loaned the other $251 million in an installment note due in February.

PaineWebber Inc. was RCA's agent, helping to arrange the financing for the satellite put in orbit in November by the space shuttle Atlantis.

By using the installment sale agreement, RCA was able to delay recognition of the taxable gain until 1987, when it might enjoy lower tax rates due to tax law changes now pending in Congress.

The gain arises because a properly positioned orbiting satellite is worth more than it cost to build, reflected on a firm's balance sheet.

• GTE tried a similar financing with its Spacenet 3. It had arranged to sell the satellite for $248.4 million, also to a group of utilities, to realize a gain. But the cost of the satellite to GTE was apparently less; it was insured for $85 million by Ariel Syndicate of Lloyd's of London.

But GTE had to refund the lease financing after the satellite was destroyed in September.

"GTE had to buy back the smoldering ruins," said D. Barry O'Connor, managing director, PaineWebber Inc., New York. "It was one of the shortest financings in history."

GTE, however, in another Ariane launch in 1985, successfully complete another satellite lease financing of about $205 million, which fell short of making the Top 10.

• To help finance its leveraged lease, Basin Electric Power Cooperative, Bismarck, N.D., arranged the first commercial paper financing, backed by its credit as lessee, rather than the typical bank letter of credit. St. Paul Bank for Cooperatives, St. Paul, Minn., was unable to fund all of the $217 million debt portion of the total $620 million lease financing for the Antelope Valley station Unit 2 in Beulah, N.D.

So working with its agent, PaineWebber, Basin Electric, arranged the $54 million commercial paper facility.

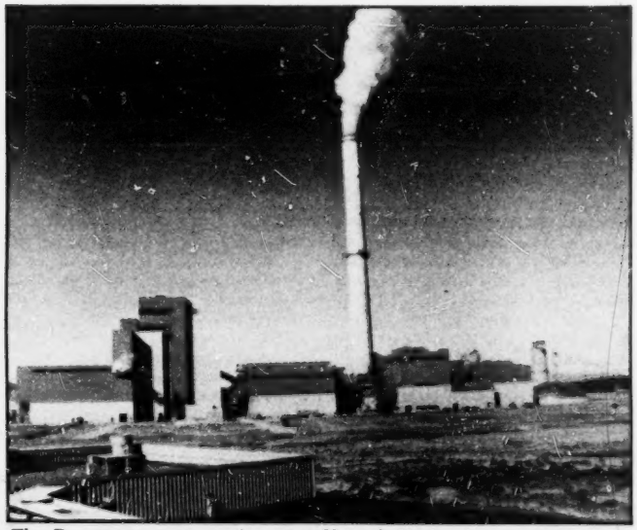
• Montana Power Co., Butte, Mont., sold its 30% interest in Colstrip unit 4 for $292 million. Drexel Burnham Lambert Leasing and SGE Associates, a partnership of GECC and Shell Leasing, invested $75 million for the equity portion.

The rest of the $217 million financing came from the sale of secured notes (*Pensions & Investment Age*, Feb. 3). ■

Largest privately placed plant or equipment leases of 1985

Lessee and leased plant/equipment	Total financing ($ mils.)	Buyer(s)	Lessee agent(s)
Tucson Electric Power Co. Springerville coal plant[1]	$900	Units of IBM, Philip Morris, Emerson Electric	Goldman, Sachs
Deseret G&T Co-op Bonanza plant (44% interest)	644.8	Shell Leasing	PaineWebber, Salomon Bros.
Basin Electric Power Co-op Antelope Valley Station Unit 2	620	Beatrice Financing, Chrysler Financial, Dart & Kraft Financial, First Chicago Leasing, J.C. Penney, Saks Fifth	First Chicago Leasing
Oglethorpe Power Corp. Scherer plant Unit 2 (60% interest)	395	Chrysler Financial, Ford Motor Credit, HEI Investment, IBM Credit	Merrill Lynch Capital Mkts.
RCA Corp. Satcom k-2	314	NA	PaineWebber
Montana Power Co. Colstrip Unit 4 (30% interest)	292	Drexel Burnham Leasing, General Electric Credit, Shell Leasing	Goldman, Sachs
GTE Corp. Spacenet 3 satellite (destroyed)	248.4	NA	PaineWebber, Salomon Bros
Fale Safe Inc., unit of Portland General Electric Co. (15% interest)	233	General Electric Credit	First Boston
Cogen Lyondell Inc., cogeneration plant unit of PSE Inc.	222.5	General Electric Credit	Donaldson Lufkin & Jenrette
Santa Fe Int'l., geothermal plant	210.5	Tricontinental Leasing (Bell Atlantic unit)	First Boston

[1] Transaction not complete, subject to state regulatory approval
NA: not available
Sources: IDD Information Services, lessees, and other firms



The Bonanza power station near Vernal, Utah, above, was the subject of the second biggest leasing deal of 1985.

$2,200,000,000

Leasing and Secured Asset Financings

During 1985 the undersigned acted as financial advisor, agent or principal on twenty-two transactions for companies with credit ratings ranging from AAA to CCC and involving leasing or secured asset financings of a broad range of equipment and real estate, including transportation equipment, commercial office space, electric generating facilities, steel manufacturing equipment, warehouses, mining facilities and equipment, high technology equipment, retail stores, alternative energy facilities, industrial properties and satellite transponders.

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Money movers

Southwestern Bell Corp.

ST. LOUIS — Southwestern Bell Corp., with about $4.5 billion in pension assets, has hired its first real estate managers for a total initial allocation of $225 million.

Mary Ann Devine, district manager-pension fund, said Heitman Advisory Corp., Chicago, was given $100 million; Boston Co. Real Estate Counsel, Boston, $75 million; and John McMahan Associates Inc., San Francisco, $50 million.

All of the money will be run in separate accounts that were funded with money previously earmarked for real estate, Ms. Devine said. She and Janell Manley, staff manager-pension fund, conducted the search with Buck Pension Fund Consultants, New York.

Southwestern Bell has a small amount in real estate through the Telephone Real Estate Equity Trust, set up by American Telephone & Telegraph Co. before it spun off its seven operating companies.

American Can Co.

GREENWICH, Conn. — The nearly $1 billion American Can Co. pension fund hired American Capital Management, Houston, to manage $20 million in fixed income, said E.C. Ecker, pension investment officer.

American Capital is a subsidiary of American Can, but will manage money for other clients as well, Mr. Ecker said. It was funded from cash flow.

Georgia-Pacific Corp.

ATLANTA — Georgia-Pacific Corp. hired Wells Fargo Investment Advisors, San Francisco, to run $20 million in its Extended Market index fund, said John Stettler, director-employee benefit investments at Georgia-Pacific.

The investment represents equal allocations from the company's $280 million pension plan and its $195 million profit-sharing plan, he said.

He said the assets came from the sale of Standard & Poor's 500 stock index futures contracts.

"It was a good complement to our S&P 500 position," said Mr. Stettler, adding the move broadens the funds' equity exposure to smaller-capitalization stocks. The equity portion of the total portfolio was unchanged.

Ennis, Knupp & Gold, Chicago, was the consultant used in the search.

Mack Trucks Inc.

ALLENTOWN, Pa. — The $450 million Mack Trucks Inc. pension fund hired Harris Trust and Savings Bank, Chicago, and First Pacific Advisors Inc., Los Angeles, while terminating another manager, said Paul McKiel, vice president-trust assets.

Mack assigned $10 million to Harris' commingled convertible fund, Mack's first convertible portfolio, he said.

Also, it assigned $20 million to First Pacific to run in equities.

He said the money for the new hires, which were selected without aid of a consultant, came from a terminated manager.

Tektronix Inc.

BEAVERTON, Ore — The $403 million Tektronix Inc. pension fund hired Morley Capital Management Inc., Lake Oswego, Ore., to take over the management of an $85 million portfolio of guaranteed investment contracts.

The GICs previously were handled in-house.

Blue Cross & Blue Shield

CHAPEL HILL, N.C. — Blue Cross & Blue Shield of North Carolina Inc., with $380 million in tax-exempt general operating funds, has picked two managers to run $70 million in assets, said Walter W. Baucom, treasurer.

Standish, Ayer & Wood Inc., Boston, will run a $60 million fixed-income account, while Delaware Investment Advisers, Philadelphia, will manage a $10 million equity portfolio. The managers were selected because their investment styles complement existing managers and their performance records are outstanding, Mr. Baucom added.

An undisclosed manager was terminated, not because of performance, but because its style no longer fit in, he said.

Both Standish, Ayer and Delaware will protect capital in down markets for the risk-averse Blue Cross fund. The addition of Delaware will boost Blue Cross' equity allocation to $35 million from $25 million.

The fund's other equity manager is Thompson, Siegel & Walmsley, Richmond, Va., while current bond managers are Manufacturers Hanover Investment Corp., New York, and Gardner and Preston Moss, Boston. Blue Cross manages its cash internally.

Peat, Marwick, Mitchell & Co., New York, was the consultant.

Columbus & S. Ohio/Pipefitters

BALTIMORE — The $225 million Columbus & Southern Ohio Electric Co. and the $17 million Steam & General Pipefitters Local 438 pension funds have shifted their equity accounts to Mount Vernon Associates from recently acquired Redwood Capital Management Inc.

Dale Troll, administrator for the Steam & General Pipefitters fund, Baltimore, said it was shifting its $2 million equity account to retain the firm's investment philosophy.

Four of the five portfolio managers, including Redwood's former president, William J. Heffner, left to set up the new firm after their offer to acquire the money management unit from Maryland National Bank was rebuffed.

Daughters of Charity

ST. LOUIS — The $52 million total Daughters of Charity Health Systems Inc. pension fund hired The Boston Co., Boston, to manage an active core equity portfolio.

The fund's initial commitment totaled $24 million and the portfolio will be managed by the Boston Co.'s Structured Investment Products Division.

Western Union Corp.

UPPER SADDLE RIVER, N.J. — Western Union Corp., with about $49 million in its savings plan, purchased a guaranteed investment contract from New England Mutual Life Insurance Co., Boston, according to Edwin M. Higgins, president of Higgins Associates, the company's consultant.

The GIC purchase included an initial investment of $7.5 million with a one-year window provision for further contributions. The contract also contains a two-year accumulation period followed by a two-year payout period.

The GIC will earn interest at a rate between 8% and 9%, Mr. Higgins said.

Uniformed Firefighters Fund

NEW YORK — The roughly $38 million Uniformed Firefighters Compensation Accrual Fund hired Unity Management Inc., Lake Success, N.Y., to manage an undisclosed amount in a balanced account.

Missouri State Employees

JEFFERSON CITY, Mo. — In a move to control the cost of its $15 million medical care plan, the Missouri State Employees' Retirement System recently selected Investment Capital Management Corp., Chicago, to manage the plan fund, confirmed Mary-Jean Hackwood, executive director of the retirement system.

The Chicago-based management firm was chosen to handle the fund because "it met our needs — both their style of management and our servicing requirements," Ms. Hackwood said.

Investment & Capital Management Corp. will manage a limited-maturity, high-quality, fixed-income portfolio.

Anderson Clayton & Co.

HOUSTON — Anderson Clayton & Co., hired RepublicBank Dallas as trustee for its new leveraged employee stock ownership plan, said Mark Addicks, manager-public relations at Anderson Clayton.

Mr. Addicks would not disclose the amount of assets in the ESOP, but said the plan will own about 750,000 shares of common stock, or 25% of the company. He added RepublicBank has hired Houlihan, Lockey, Howard & Zukin Inc., Los Angeles, as an evaluation consultant.

Georgia State Teachers' Fund

ATLANTA — The $5.5 billion Georgia State Teachers' Retirement Fund has placed $110 million in an index fund modeled on the Standard & Poor's 500 stock index, said Graham R. Lynch, director-division of investment services.

The fund, which is part of the $8 billion Georgia State Retirement Systems, needed to expand its stable of four equity advisers. Instead of hiring a new one, though, the fund created the internally managed index fund with the help of Wilshire Associates, Santa Monica, Calif., Mr. Lynch explained.

The retirement system limited the size of the index fund to no more than 350 stocks. In addition, Georgia law requires the fund invest in American companies that have paid a dividend in at least three of the past five years.

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Big deals still brew . . .

Continued from page 34

the waters for the program with a two-stage, $20 million deal. The transaction it is working on will total between $50 million and $100 million, said Leslie Wilson, executive vice president and general manager of the credit subsidiary.

The private placement will include a pool of five-year leases on new equipment that will be delivered to customers this year. Richard Sun, vice president at First Boston Corp., agent on the deal, said the leases will carry a 9.7% lease rate and will give farmers the option to buy the equipment at the end of the lease at 15% of its original cost. That 15% purchase option is calculated into the 9.7% interest rate, Mr. Sun said.

The deal also will include a pooled letter of credit against losses on a percentage of the deal. The annual loss rate on these types of leases is less than 1%, Mr. Sun noted. Although what percentage of the transaction will be guaranteed by the letter of credit was still being negotiated, he estimated it would be around 20%.

Also still under negotiation are the up front and ongoing service fees that Deutz-Allis will get for administering the lease portfolio on behalf of investors.

The 9.7% rate on the leases is more than 400 basis points lower than farmers would get through other equipment financing sources, Mr. Sun said. Investors are willing to accept the lower rate in exchange for receiving the investment tax credits and depreciation associated with the leases.

Deutz-Allis has turned to the pooled financing vehicle primarily to provide an attractive equipment financing alternative, through its dealers, to the troubled farm community, Mr. Wilson said.

"Farmers used to be able to enjoy the tax benefits of owning equipment," he said. "But their thin tax position these days means that those benefits often exceed farmers' needs."

Deutz-Allis Credit previously offered lease financing to customers itself, carrying the tax-oriented leases for its own account. However, Deutz-Allis, formerly Allis-Chalmers Corp., has less need for the investment tax credits associated with the leases since it was acquired by Klockner-Humboldt-Deutz A.G. last year. "A sizable amount of tax benefit carry forwards came along with the acquisition," Mr. Wilson said.

The new lease finance program — an off-balance sheet funding method for Deutz-Allis — fits into its current corporate financing game plan.

"We've decided we want to do more off-balance sheet funding generally as a means of reducing leverage and improving our capital structure," Mr. Wilson said.

He said he is looking to the private vehicle as an ongoing lease financing program. He acknowledges, however, that how long-lived the program will be largely hinges on how tax reform shakes out in Washington. ■

Dynamic . . .

Continued from page 3

stocks; now, portfolio insurance. "The best ideas are those that few people hear about," he said.

Mr. Tokar said he doesn't see anything wrong with protecting gains, but believes dynamic hedging is not the only way to do it. Diversification is itself a form of protection, and his firm's pension fund is well diversified, he said.

LOR's Mr. Leland and Mark Rubinstein, both professors at the University of California Business School, Berkeley, developed the theories surrounding dynamic hedging in the late 1970s and formed LOR with John O'Brien in 1981. Messrs. Leland and Rubinstein are managing directors of the firm, while Mr. O'Brien is chairman and chief executive officer.

At the end of March, the firm and others using its technology were applying the strategy to about $6.1 billion in assets, said Larry Edwards, president. Since then, $400 million to $500 million probably has been added, he said.

Dynamic hedging managers that don't use the LOR technology probably are implementing programs for at least $2 billion in assets, according to estimates by industry experts.

This makes for a total of $8.5 billion being dynamically hedged, up from estimates of $6 billion last fall and $200 million two years ago.

Still, the strategy definitely has its critics. A vocal one is Richard Brignoli, president and chief executive officer of Brignoli Models Inc., which develops investment models for equities and derivative instruments, and general partner of Brignoli, Curley & Roberts Associates. Both firms are in New York.

"It's not insurance per se," Mr. Brignoli said of portfolio insurance. "At best, the people that are buying this assurance are self-insuring, which is no insurance at all."

The risks of the equity market are not able to be pooled, so no investor can take on part of another's risk, he said.

Mr. Leland agreed the product does not amount to risk pooling. But he said, "It is insurance in the sense that your loss is limited on the downside, and you capture the gain less the premium on the upside . . . It's insurance in exactly the form that buying a protective put option on an individual stock is insurance on that stock."

Mr. Leland also contended the product is not self-insurance, if self-insurance is defined as setting aside an amount of money each year and hoping it will build up enough to cover the losses that come at some time. With dynamic hedging, losses will be covered whether they occur one year or 50 years from now, he said.

Mr. Brignoli said another problem is that investors using portfolio insurance over a long time horizon — say, five years — still can report substantial losses between the beginning and end of that horizon. "It doesn't solve the problem of underperforming the market," he said.

Mr. Leland replied, "You do have protection prior to the end, but the protection is less than it is at the expiring moment. If that really disturbs people, more interim protection can be designed into the system."

Another criticism from Mr. Brignoli is that the system calls for buying futures when the market is on the way up and selling them when it's going down. "That costs money," he said.

Mr. Leland said whether this is good or bad depends on whether the market continues in the direction it was headed. "If the market continues to go up, we, of course, with hindsight look like geniuses," he said. "If we sell and the market continues to go down, again we look like geniuses."

However, markets don't always go straight up or down, Mr. Leland said. If an investor buys the futures in a rising market that quickly turns into a falling one, and then sells out, the investor has paid a premium, he said. "That is the place where you have paid the price of the insurance," he said. Portfolio insurance does not promise something for nothing, he emphasized.

Mr. Brignoli said any strategy that is most useful in long trends isn't really useful, because no one is able to predict long trends.

He also charged portfolio insurance will create ever-wider swings in the financial markets as an increasing number of investors use it. It also will become increasingly expensive to implement, he said. "I sincerely doubt that it will be able to be implemented with any large pools," he said.

Mr. Leland replied, "My position is not everyone can simultaneously follow the same dynamic strategy." In every sale or purchase by a dynamic hedger, there must be someone on the other side of the transaction, he said. "In fact, portfolio insurers may be trading with portfolio rebalancers," he said.

If markets became highly volatile, which is possible, rebalancers or other candidates for the flip side of dynamic hedgers' transactions likely would see an opportunity to make a profit, Mr. Leland said. Then, with supply and demand in line with each other, volatility would decrease, he said.

Mr. Brignoli contended, however, that it will be harder for dynamic hedgers to find the other side of their trades in a down market than in an up one.

Still, Mr. Leland said, those who follow a dynamic hedging strategy and those who oppose it are natural trading partners.

"Not everyone has the same investment objectives or requirements," he said. He said portfolio insurance is highly appropriate for investors with clear-cut fiduciary responsibilities that limit their ability to take downside risk.

Others interviewed disagreed slightly, saying it likely is appropriate for some pension funds, but not others. "It's a useful tool for a company that has some very special needs for its pension fund," said a Southern corporate pension executive, who asked not to be identified.

Such companies would include Denver-based Manville, which is in reorganization under the Federal Bankruptcy Act and could not bear market losses in its pension fund, the executive said. But companies that wouldn't suffer severe financial impact probably would do better to look to the free market, he said.

His firm has looked at portfolio insurance, but does not plan to adopt it in the near future. Before making such a decision, he said, he would like to see how it performs in a down market.

Halliburton's Mr. Duffield said his firm may or may not decide that portfolio insurance could be useful. However, the fact that Halliburton's primary retirement plan is a defined contribution plan makes it worth considering, he said. "Certainly, volatility is a key consideration for defined contribution plans," he said.

TWA already has applied the strategy to a defined contribution plan (*Pensions & Investment Age*, Nov. 25).

Gates, like TWA and Manville, is a satisfied user of LOR's portfolio insurance strategy. "It's worked very much as it was predicted it would work," said Clayton Hill, director of corporate insurance and employee benefits. Gates applies the strategy to the $135 million equity portion of its $270 million pension fund.

It has been using the strategy for about two years. During that period, Mr. Hill said, it has had to apply the hedge only twice, when the generally bullish market took brief bearish turns.

"We knew going in that this would be the expensive part of a fiduciary hedge program," he said. 'But you never know when a downward move would be the one that precipitates a long downward cycle . . . If you're a fund manager and you lived through the '74 market slide, you know it happens rapidly and the individual investment managers get caught in the slide."

In a bull market, portfolio insurance is useful for locking up gains, Mr. Hill said. As its equity portfolio has increased in value, Gates has raised the amount covered by the program, he said.

Also, because of the dynamic hedging program, Gates' equity managers have been able to be invested to a greater degree than they might have been otherwise.

Manville also has used the program to lock up gains and to increase its commitment to equities. As a matter of fact, it has eliminated fixed income from its pension fund, except in special situations (*P&I Age*, March 3).

An East Coast corporate pension executive, who asked not to be identified, said the concern for locking up gains has led his firm to consider implementing portfolio insurance, but not without reservations.

"It's not a panacea," he said. "There are costs involved which may not be readily apparent at first blush."

Still, said Gates' Mr. Hill, "We think the protection is worth the price." ■

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April 2, 1986

Public funds . . .

Continued from page 3

The leader in number of accounts gained was Bankers Trust Co., New York, with nine master trust or custodial accounts. Its Investment Management Group gained two discretionary management accounts, but they were counted separately from the master trust and custodial accounts.

Neuberger & Berman Pension Management, New York, gained five accounts, and five firms tied with four new accounts each.

Managers losing large or numerous accounts during the quarter included Gardner and Preston Moss Inc., Boston, and Redwood Capital Management Inc., Baltimore.

The $4.7 billion Arizona Public Employees' Retirement System terminated Gardner and Preston Moss, which ran a $470 million balanced portfolio for the fund. The fund's investment advisory council found the firm's style too conservative, an official said. The assets were moved to Wells Fargo and to INVESCO Capital Management Inc., Atlanta, but the amount allocated to each was not available.

Executives at four pension funds said they are moving assets from Redwood, which had four of its five investment professionals depart to set up their own firm. The new firm, Mount Vernon Associates, Baltimore, received an allocation from at least two of the funds — Columbus & Southern Ohio Electric Co., Columbus, Ohio, and Warner-Lambert Co., Morris Plains, N.J. ■

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Cov. 1, p. 2, 10, 25, 71.

C2710-2

AT&T nets $200 million by adopting FASB 87

By Richard J. Gillespie

NEW YORK — American Telephone & Telegraph Co., with a pension plan that is more than $10 billion overfunded, boosted first-quarter pre-tax earnings by $200 million, or 9 cents per share, with the adoption of Financial Accounting Standards Board Statement 87.

The AT&T move followed a similar one by IBM Corp., Stamford, Conn., which analysts estimate boosted its first-quarter earnings by as much as $100 million or 10 cents per share.

Analysts raised the possibility that the first-quarter earnings boost from the accounting change may not be the last for AT&T.

Rather than merely report significantly lower contributions, they said, AT&T could also adopt other changes to significantly reduce actual pension fund contributions.

AT&T paid $174 million in contributions to its fund for the first quarter using its traditional method. By adopting the new reporting method under Statement 87, it decreased pension costs by $200 million.

The discrepancy results from changes in AT&T's pension fund accounting disclosure wrought by its adoption of Statement 87.

Under Statement 87, AT&T gets to amortize its actuarial surplus; Statement 87 also calls for the use of the unit credit method for calculating liabilities while AT&T uses the aggregate cost method in

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Pensions & Investment Age

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Funds watch as others try program trades

By Trudy Ring

Most pension funds are sitting on the sidelines while other investors — including cash managers and brokerage firms — engage in program trading, the splashy new market play involving arbitrage.

Corporate pension executives and money managers cite several reasons they have shied away from program trading:

- Pension funds have long-term needs, and don't have idle cash on hand to participate in the market play.
- Just as some of them got interested, spreads between stocks and derivatives narrowed as more players entered the game.
- Program trading requires intensive monitoring and incurs additional transaction costs at a time when many fund executives are trying to reduce those costs.

Traders using this type of arbitrage seek to take advantage of the spreads between the prices of stocks and the prices of stock index futures or options. For instance, when the futures are overvalued in relation to the market, they will buy stocks that resemble the Standard & Poor's 500 stock index and sell short the futures based on that index.

In doing so, they can lock in a risk-free rate of return that may be 100 or more basis points higher than rates on short-term fixed-income instruments, such as Treasury bills. However, experts say spreads between stocks and the derivative instruments are narrowing, making the arbitrage play less profitable.

Photo by Arnie Adler

Program trades often dominate equity trading-floor activity.

Relatively few pension funds have used these trades, but several are looking at them. The trades more commonly are used in corporate cash management or by brokerage houses trading for their own accounts.

K mart Corp., Troy, Mich., uses stock index arbitrage in its 501(c)9 medical trust and is studying its use for the pension fund, said John Steinbach, assistant treasurer.

stridge Capital Management Inc., Los Angeles, manages the K mart $30 million medical trust.

"We've been involved with the firm for about three months now, and they've had a program on most of the time," Mr. Steinbach said. "We've been very pleased with the return." The return has been 200 to 300 basis points higher than that of T-bills, he said.

K mart has not used arbitrage programs in its $800 million pension fund, largely because its needs are longer term than those of the medical trust, Mr. Steinbach said. He added he is studying many uses of stock index futures and options for the fund and is not ruling out anything.

Indeed, the fact that pension funds have long-term needs has held down their participation in these trades. Martha Binzel, senior manager-benefit plans investment at Sara Lee Corp., Chicago, said Sara Lee's pension fund doesn't have the cash necessary on a permanent basis to use arbitrage programs.

"Pension funds don't tend to carry a lot of cash, and their investments tend to be longer term in nature," said R. Sheldon Johnson, a principal of Morgan Stanley & Co., New York.

Continued on page 70

Carpenters hammer at American Express

By Ed Christman

NEW YORK — The head of the United Brotherhood of Carpenters & Joiners is urging local union pension funds to avoid using American Express Co. and such subsidiaries as Shearson Asset Management Inc., a money manager.

Patrick J. Campbell, general president of the carpenters, said in a union publication that an investment adviser "who either directly or through subsidiary operations refuses to work with our members does not deserve our business."

His letter in "Carpenter" magazine said American Express and its subsidiaries benefit "handsomely from the management of union pension funds, while at the same time they engage in the develop[illegible] of construction using non-union labor contractors."

At issue is a credit card facility being built by American Express in Greensboro, N.C. Carpenters' union officials allege union contractors were shut out in the bidding process to be general contractor.

The April issue of the magazine contained a two-page article detailing the dispute and a profile of the various operations of American Express and how it "reaps considerable revenues" as investment managers of building trades union pension funds.

It also called for members to provide information on the construction activities of American Express and subsidiaries, and information on existing financial relationships with the company.

No union pension fund appar-

Continued on page 68

Waiver, restructuring eyed

Western Union falters

By Joel Chernoff

UPPER SADDLE RIVER, N.J. — Western Union Corp., weighed down by heavy debt obligations and strapped for cash, is trying to avert bankruptcy by such measures as a pension contribution waiver and the restructuring of most of its equity and debt obligations.

Facing a June 30 deadline from its banks, the severely troubled telecommunications firm has proposed merging itself into its subsidiary, Western Union Telegraph Co.

In the process, it will bolster its strained cash flow by stretching debt maturities, swapping new debentures for old ones, paying sinking fund payments with the old securities and issuing $200 million in junk bonds.

While the recapitalization plan may give the company a reprieve from its immediate obligations, analysts question whether the company will survive.

"This plan will only solve one part of the problem," said John Bain, senior vice president for Shearson Lehman Brothers Inc., New York. Western Union still needs "a business plan," he said.

"I wouldn't want to lend them money," said Harry Rosenthal, associate director at Bear, Stearns & Co., New York.

Western Union's plan hinges on a number of unknowns, including whether it will receive a government waiver of a $52.5 million contribution to its ill-funded pension plan, and whether it can win an appeal of a $36 million antitrust judgment rendered against the company last November.

The Pension Benefit Guaranty Corp., which reviews major requests for funding waivers, will "vigorously oppose" granting the pension defer-

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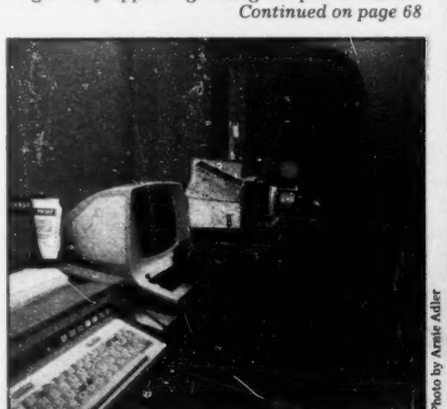

Photo by Arnie Adler

Western Union is trying to avert bankruptcy.

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Fund's insurance held up

Philadelphia Gas Works postpones eight hirings

By Chuck Paustian

PHILADELPHIA — The inability to secure fiduciary liability insurance may prove costly to the $156 million Philadelphia Gas Works Retirement Reserve Fund, said Curtis O. Townsend, deputy director of finance-pension fund asset manager for the city.

The hiring of as many as eight investment managers has been postponed until the fund has been able to secure insurance for Mr. Townsend and members of the Sinking Fund Commission, who oversee the investment of the pension assets.

Philadelphia Gas Works, owned by the city, is looking to restructure its portfolio in an attempt to reduce its $15 million unfunded liability, Mr. Townsend said.

He added the fund probably will have to pay a high premium for the insurance once it is obtained. The delay in hiring the managers, however, may cost the fund millions in opportunity costs given current market conditions.

Mr. Townsend said the fund, which is about 20 years old, historically had followed a very conservative investment strategy.

The approximate historical asset mix of the fund was 36% bonds, 35% cash, 19% government securities and 10% equities.

"Since the fund has never been drawn upon, and it is not likely to be drawn upon until 1991, I feel we can become more aggressive," he said.

Mr. Townsend said he is looking to hire between four and six equity managers, for about $12 million to $14 million each and two or three debt managers, for about $15 million each. He added the search for the managers began at the end of February.

He also said he would like to invest about $10 million to $15 million in alternative investment vehicles, such as real estate or venture capital, to improve the returns of the fund.

When he is finished, Mr. Townsend said he would like the asset mix to be about 50% equities, 40% bonds, 8% alternative investments and 2% cash.

He said if the fund could not obtain the proper insurance coverage, he might have to call an emergency meeting of the board of trustees.

"If we don't get (the insurance coverage), I think it will pose some problems," Mr. Townsend said.

On April 21, he said the fund was close to obtaining an insurance package to cover all those associated with the fund. The next day, however, he said the fund was unable to close that deal because the insurance carrier would not agree to provide the insurance unless another carrier was involved.

Mr. Townsend declined to name the insurance carrier.

The current environment in both the stock and bond markets places an even greater need to secure the insurance promptly, so the fund can hire the managers and invest its assets.

Continued on page 65

> ***"Since the fund has never been drawn upon, and it is not likely to be drawn upon until 1991, I feel we can become more aggressive."***
> **— Curtis O. Townsend**

DOL says Graniteville diverted plan surplus

By Joel Chernoff

AIKEN, S.C. — The Department of Labor is suing eight current and former officials of Graniteville Co. for failing to press the company to hand over to its new retirement plan some $27 million in surplus pension assets from two terminated plans.

The department alleges the company diverted to corporate coffers an amount equal to surplus assets that was "irrevocably committed" to a new Graniteville employee stock ownership plan, later converted to a retirement savings plan.

The excess assets were used to reduce corporate debt incurred in the July 1983 takeover of the textile company in Graniteville, S.C., by Southeastern Public Service Corp., the suit alleges.

Southeastern is controlled by Miami financier Victor Posner.

The eight corporate and benefit officers, members of a committee that administers the plan, violated their fiduciary duties when they failed to try to obtain control of the assets for the plan, the department charged.

The department's complaint also argued that lucrative compensation contracts given four of the company's top officials during the takeover — all of whom served on the administrative committee — swayed their decision affecting the retirement plan.

The government now wants the officials, Graniteville and Southeastern to pay the plan the unpaid $27 million in principal and interest.

Graniteville officials declined to comment on the litigation.

The suit is the second brought by the government in recent weeks relating to corporate actions affecting pension plans terminated so the corporate sponsor could recapture surplus assets.

The first was filed March 13 against the trustees of the Los Angeles-based Ed Simon Ltd. pension plan for retroactively amending the terminated plan to recover some $892,000 in surplus assets, despite warnings by the Pension Benefit Guaranty Corp. that such an action would be illegal (*Pensions & Investment Age*, March 31).

David M. Walker, deputy assistant secretary for Pension and Welfare Benefit Administration, said the Graniteville litigation reinforces that plan fiduciaries must enforce contractual agreements affecting plan assets. That the case involves a terminated plan is incidental, he said.

The suit was filed April 14 in U.S. District Court in Aiken.

The history of the litigation is complex. In an April 1983 effort to maintain control of the company, Graniteville's board sought to terminate its overfunded pension plans for salaried and hourly employees, and place the estimated $25 million to $30 million in surplus assets in a newly formed ESOP.

The board "irrevocably committed and dedicated to the plan an amount equal to the surplus assets," the department claimed.

Appointed to administer the plan were Robert Timmerman, the company's then-president and chief executive officer; Samuel Swint and Jerry Johnson, executive vice presidents; John Cunningham, treasurer; and William Johnson and Carl Littlejohn, whose titles were not listed. Two

Continued on page 67

AT&T acts on South Africa

By Barry B. Burr

American Telephone & Telegraph Co.'s plan to set up a South Africa-free investment option in its $4.3 billion savings plan could lead other companies to offer similar choices.

But a Securities and Exchange Commission ruling that AT&T's proxy statements did not have to include a proposal calling for divestiture from the AT&T pension fund may help corporations resist calls for divestiture from defined benefit plans.

The SEC, in its ruling, informed AT&T that to divest its $40 billion pension fund of South Africa-related securities would put it in jeopardy of violating the Employee Retirement Income Security Act.

AT&T is believed to be the second corporate sponsor to provide a South Africa-free equity investment option for its employee savings plan. Lotus Development Corp., Cambridge, Mass., adopted a South Africa-related investment policy last year, shortly after starting its employee benefit plans (*Pensions & Investment Age*, Aug. 5).

AT&T was responding to a wide range of South Africa-related demands by a group of five employees, led by Mel Robin, a research scientist at AT&T Bell Laboratories in Murray Hill, N.J., said Walter G. Murphy, AT&T's director of corporate information.

A separate employee group, the Alliance of Black Telecommunications Employees, led by Alex Tillman, also of Bell Laboratories, had sought a shareholders' vote on restricting the investments of the defined benefit plan, Mr. Murphy said.

Cecilia D. Blye, SEC special counsel, supported AT&T's position that a matter involving the pension fund was inappropriate for shareholder consideration.

"The proposal may be omitted from the company's proxy material under rule 14a-8(c)(2), because it would require the company as fiduciary of the pension fund to take steps which would place the fiduciary in jeopardy of breaching its obligation under ERISA," said Mr. Murphy, quoting Ms. Blye's letter in response to AT&T's inquiry.

Neither Ms. Blye nor officials of the Department of Labor, which oversees ERISA compliance, could be reached for comment.

ERISA requires funds to invest their assets solely with regard to return and risk objectives, rather than political goals. No company

Continued on page 68

Misrepresentation alleged

SEC suing manager

By Chuck Paustian

WASHINGTON — The Securities and Exchange Commission has filed a civil suit charging Mark E. Spangler and his Boston money management firm, The Spangler Group, with misrepresenting information to investors.

The SEC's action is seen by some as a possible warning to the investment management profession to step up its self-policing activities, or face government intervention.

Consultants, investment managers and pension executives said the suit will help to focus the industry's attention on performance measurement, although they all added most money managers present performance results in a legitimate manner.

Mr. Spangler is president of The Spangler Group, which actively manages about $25 million, according to the SEC; it was not known how much was tax exempt.

He was charged with misleading investors regarding the firm's investment performance, forging an opinion letter from the accounting firm of Arthur Young & Co. verifying the performance results and misrepresenting his educational and professional background.

"The commission is seeking a permanent injunction and whatever other equitable relief the courts deem appropriate," said Harry Weiss, branch chief, division of enforcement of the SEC.

Mr. Weiss said the SEC's complaint is a civil action. He would not say what caused the commission to begin the investigation.

The SEC received a temporary restraining order, issued April 11, enjoining Mr. Spangler and The Spangler Group from holding, controlling or possessing the funds or securities of the firm's clients and from withdrawing funds or securities from any client account prior to April 16.

Mr. Weiss said the restraining order has been extended, through mutual agreement of both parties, until April 30. An independent auditor, to be named by both parties, also was appointed, he said.

He added investors are not affected by the restraining order and are free to remove any of their assets from The Spangler Group.

Mr. Spangler could not be reached for comment. His attorney — Paul G. Roberts, partner in the Boston law firm of Forman, Roberts, Klickstein & Levy — said he was not aware of any clients removing assets.

"My client will respond in due course to the charges in court," he added.

The pension community reacted to the suit with more apprehension than surprise, fearing increased government involvement in the investment management industry.

"To me, it's very much suspicions confirmed," said Roger C. Bransford, managing director of William M. Mercer-Meidinger Asset Planning Inc., Atlanta.

"I was not surprised to see it. I

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Bill of rights now necessary

THE SHAREHOLDER bill of rights developed by the Council of Institutional Investors is long overdue.

Such a bill of rights may have been unnecessary when the top managers of companies also were major shareholders in the companies. In such cases, the interests of management and shareholders were unlikely to diverge significantly.

Today, however, when top management often owns only a minuscule amount of a company's stock, the interests of managers and shareholders can be at odds.

Indeed, management may sometimes entrench itself at shareholders' expense. Management may fight a takeover bid that would be in the long-term interests of the shareholders, for example. It may pay "greenmail" to a corporate raider to protect its own interests. As Edward S. Hadas, an analyst at David L. Babson & Co. Inc. has pointed out, "the prevalence of million-dollar salaries and lucrative 'golden parachutes' does nothing to enhance trust in management selflessness."

Shareholders should not be left with only one recourse — the sale of the stock — in such situations. They should have the right to vote on such issues as greenmail, poison pills and golden parachutes — matters that ultimately may affect the financial health of the company.

The shareholders' bill of rights would give them this right and several others. Unfortunately, the shareholders' bill of rights is not a law or even a regulation. It is a prescription, with little to back it up.

The Council of Institutional Investors and others who support the bill of rights should publicize it so shareholders, both individual and institutional, can become aware of it.

If shareholders feel the need of such a bill of rights to reinforce their interests, they will clamor for recognition and adoption of it by corporations, much as corporations adopted the Sullivan Principles of behavior in South Africa.

Corporate managements that truly believe they always act in the interests of shareholders should have no reluctance to recognize and abide by this bill of rights.

FASB panel's role needs defining

WHETHER OR NOT the Financial Accounting Standards Board staff that developed the new pension reporting standards ignored the task force that was supposed to help it in its efforts, it apparently has much to learn about the care and feeding of such task forces.

Several of the task force members believe their deliberations were merely window dressing, as reported in the April 14 issue of *Pensions & Investment Age*. They left the task force convinced that not only were their concerns and suggestions ignored, but also that the FASB staff never had any intention of listening to them.

To avoid similar situations, the FASB must make it clear to those invited to serve on its task forces exactly what role they are expected to play.

It should define the responsibilities of the task force, how often it is expected to meet, what input it is expected to give, and how much weight will be given to that input.

At least then, task force members can decide whether their participation is likely to have sufficient impact to make it worthwhile given the time and effort necessary to become familiar with the intricacies of the proposed standards.

Failing this, the FASB may find itself again faced with noisily dissenting task force members who believe their time has been wasted.

Letters to the editor

High-risk tag rebuttal

To the Editor: Alan Krauss' March 31 article on "vulture funds" does a great disservice to your readers.

It creates the impression that all pension fund vehicles that invest in distressed properties are high risk, speculative entities, run by fund managers who are dependent on improving market cycles to achieve investment goals.

To the contrary, there are managers who are highly experienced — indeed specialized — investors in distressed and bankrupt properties. At American Continental Properties Group we have successfully focused most of our energies on such projects since our founding in 1978. Our pension fund subsidiary — ACP Advisors, Inc. — now offers the benefit of that experience to pension fund managers.

Even in the best of times, there are always turnaround opportunities with distressed real estate. Given the current nature of the real estate market, pension fund investments in turnaround commingled oriented commingled pools represent good market strategy.

And contrary to what your article stated, these investments are not necessarily for a long-range time horizon. Adding value to distressed real estate can result in significant gains in a relatively short time frame of three to five years.

On the other hand, those that count on an improving market cycle to bring about a capital gain may be waiting a long time indeed.

Daniele D. Bodini
President
American Continental
Properties
New York

Fund on wrong list

To the Editor: The 1985 PIPER performance report in the Feb. 17 issue miscategorizes our Lincoln National, Indiana, special opportunity fund results. The page 21 list of top equity funds grouped by size (one-year returns) inserts LNC's 1985 performance of 44.1% in the "under $10 million" category. The fund during 1985 varied between $15 million and $25 million in market value, so should be ranked instead as the top-performing fund nationally in its proper size universe.

Of note, MPT Associates, an investment affiliate of Lincoln, also manages a second special fund of approximately $40 million for LNC using our same basic MPT quantitative/judgmental disciplined investment approach. Its 1985 results lagged the aforementioned fund by only 3.1%, which would rank it third nationally in the same category.

Charles M. Kulp
Vice president,
portfolio manager
MPT Associates
Investment Management
New York

Pensions & Investment Age welcomes letters to the editor.

Letters should include the name, address and, when appropriate, company of the writer.

The editors of *P&I Age* reserve the right to condense any letter.

Address letters to: Michael J. Clowes, editor, *P&I Age*, 220 E. 42nd St., New York, N.Y. 10017.

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Cash Management

Strong market weakens ploy

Managers find new methods of dividend capture

By Richard J. Gillespie

NEW YORK — The bull market of the past 12 months has threatened the viability of a once booming cash management technique — dividend capture.

Although complex, variations of dividend capture have offered returns of sometimes two to three times the after-tax return on Treasury bills.

As a result, dividend capture has mushroomed into a billion-dollar market in the past few years, analysts say.

But as stock prices have risen dramatically during the past 12 months, dividend yields on stocks have fallen to about 3.5% from between 6% and 7%. The low yields have begun to threaten the viability of traditional dividend capture while spawning variants that minimize the use of the dividend and create value in other ways.

Using the technique, a corporate cash manager benefits from the 85% dividend tax exclusion by buying stocks to capture the dividends and then selling them immediately.

At the same time, a corporate cash manager will use options on the stock to capture the premium or to hedge the position, and sometimes also hedge the stock with the purchase of a stock index future (to protect the cash investment from capital fluctuations).

"When we first went into this, the market was pretty lucrative, you could get 12% and 14% after-tax returns," said Gil Coblentz, director of finance at C.B. Fleet Co., Lynchburg, Va., a health and beauty aids concern that had total revenue of about $70 million in 1985.

Last year, the dividend capture program bettered the corporation's municipal investments by 250 basis points, and its Treasury bills by 300 basis points, on an after tax-basis, Mr. Coblentz said.

As dividend capture caught on, and the market became more competitive, however, returns have not been as spectacular, he noted. The recent interest rate drop has taken a lot of the premium out of the options side of the program because options premiums contain an interest rate-sensitive component, he said.

Now that yields on stocks are also down, the dividend capture program, like the company's other corporate cash investments, will be coming under pressure, he said.

The result is that Mr. Coblentz anticipates the returns from the dividend capture program, which comprises about one-third of the company's $14 million to $18 million cash, will be lower this year, perhaps by as much as one or two percentage points on an after-tax basis.

But lower yields are simply the latest in a long line of setbacks that dividend capture managers have had to face, even while the growth of assets under management has been extraordinary.

It was because of the phenomenal growth that the managers ran into trouble: It created too many players who began bidding up the prices of stocks before dividend dates.

Earlier, in 1984, dividend capture managers had to find ways around the Deficit Reduction Act, which imposed new requirements on tax-advan-

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Theodore Mertz, senior vice president-cash management, left, and Sylvester Florian, wire transfer product manager at Mellon Bank.

Banks correct kinks in overdraft system

By Chuck Paustian

After a shaky first couple of weeks, banks seem to have worked out the kinks of the Federal Reserve Bank's intraday overdraft monitoring system.

The Fed's program, which began March 27, has caused some minor headaches for a few banks and their corporate clients, mainly in the form of delayed wire transfer payments.

Banks, including Mellon Bank, Pittsburgh, and Bank of Oklahoma, Tulsa, have responded by implementing steps to minimize the impact of these mishaps and to eventually eliminate them.

The cash managers of two companies that have experienced some problems with the monitoring system — Allegheny International Inc., Pittsburgh, and Quaker State Oil Refining Corp., Oil City, Pa. — said the effects of the delays were insignificant and they do not expect similar occurrences.

Under the Federal Reserve's monitoring program, a bank would not be allowed to transfer any funds over the wire network if the bank had reached its overdraft limit. The bank would be allowed to continue its wire transfer activity once it had received sufficient funds from other banks.

Corporate cash managers and bank executives had feared the new system would severely limit their abilities to make timely wire transfer payments. In addition, if enough banks were prohibited from making wire payments, some feared a domino effect, causing a gridlock of the entire wire transfer network (*Pensions & Investment Age*, Nov. 25).

Although the fears of most executives have yet to be realized, there were a few hitches under the new monitoring program.

Deborah DiLorenzo, administrator of cash management at Allegheny, said the company had a few wire transfers held by Mellon for a short period during the first weeks after the system was in place.

"It was just a case of miscommunication between the account officer and the wire room," said Ms. DiLorenzo. "They were only held for a short period of time until the account officer approved it."

She said the delay did not have any major impact on the company because the amount of the transfer was "only a couple hundred thousand" and the delay was only for about 10 minutes.

She also said there have been no problems involving wire transfers since those early instances.

On average, Allegheny initiates about $20 million in wire transfers each day.

Continued on page 27

Cash notes

Interest rules eyed

WASHINGTON — The Treasury Department is proposing to introduce "straightforward" rules for transferring interest on book-entry Treasury securities.

The rules would apply only to securities in the Treasury/Reserve Automated Debit Entry System, a commercial book-entry system.

The deadline for comments on the proposals is May 13.

The Treasury is proposing to use the automated clearinghouse, a low-cost electronic payment processor operated among banks, to pay interest to bond and note holders.

In a move that will phase out paper securities, the U.S. Treasury will make all new Treasury bonds and notes book-entry securities beginning July 1.

As part of the change, it will also introduce a new Treasury Direct Access Book Entry System (Treasury Direct) based on rules proposed last December.

Intraday statements

CHICAGO — First National Bank of Chicago introduced an intraday statement report, which a spokesman claims is the only product available to provide on-line, real-time balance and detailed transaction data in a single report.

Called FirstCash Intraday Statement Report, it takes the previous day's ending balance and rolls over the float to provide the treasurer with the current balance information at the start of each day.

Each time a debit or credit is processed through an account, the information is transmitted

Continued on page 27

Payden & Rygel index of short maturity assets*

(for month ended March 31)

	March 1986	Quarter ended 3/31/86	Year to date	12 months ended 3/31/86	Yield level monthly change[a]
	Unannualized total returns				
90-day					
U.S. Treasury bill	0.7287	1.9239	1.9239	8.1636	−68
Domestic CD	0.7272	2.0358	2.0358	8.5777	−45
Euro $ CD	0.7311	2.0508	2.0508	8.7352	−43
180-day					
U.S. Treasury bill	0.9387	2.1939	2.1939	9.1968	−73
Domestic CD	0.8336	2.1516	2.1516	9.1559	−47
Euro $ CD	0.8241	2.1554	2.1554	9.3402	−43
1-year					
U.S. Treasury note	1.2521	2.6482	2.6482	10.9733	−71
2-year					
U.S. Treasury note	2.0503	3.8573	3.8573	15.9411	−79

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. 90- and 180-day Treasury bill yield level changes on discount basis.

[a]Basis points.

Source: Payden & Rygel, Los Angeles

The Payden & Rygel index of short maturity assets is a regular feature of the cash management section. It represents total returns on money market instruments, rather than simple yields. It is intended to provide a benchmark for judging performance on short-term assets.

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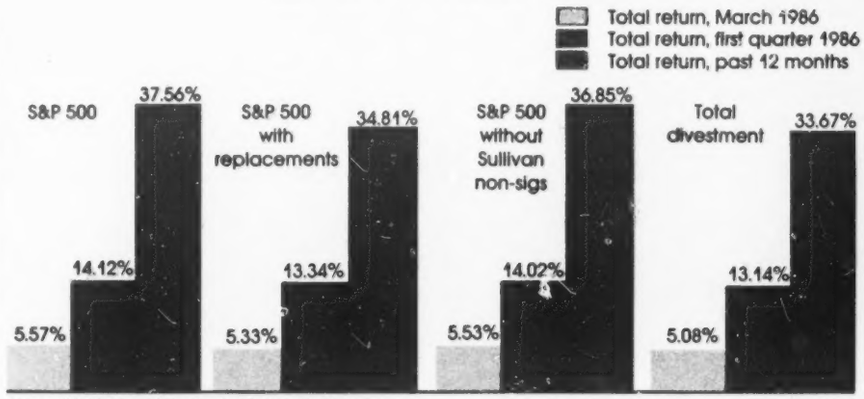
Statistically speaking

The Statistically Speaking page offers an at-a-glance look at statistics for the latest quarter.

The Wilshire South Africa Free Index, Mercer-Meidinger bullet GIC data, First Chicago's MMI and the Russell 3000 returns will appear regularly.

Other data will be used as time and space allow.

South Africa Free Index



Source: Wilshire Associates, Santa Monica, Calif.

S&P 500 with replacements: replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories**: excludes 20 companies, no replacements. **Total divestment**: eliminates all companies with South Africa involvement, no replacements.

Multiple Markets Index

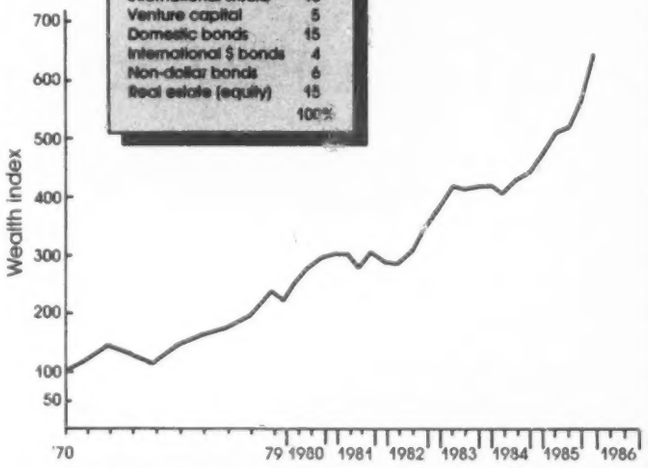
12/31/69 = 100 Data through 3/31/86

1970 through 1979 data reflect year-end figure

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of nine asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

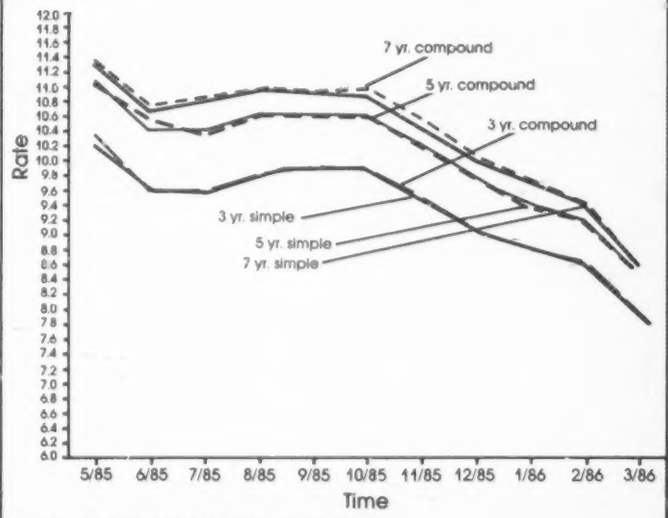
	Weights
Large cap stocks	30%
Small cap stocks	15
International stocks	10
Venture capital	5
Domestic bonds	15
International $ bonds	4
Non-dollar bonds	6
Real estate (equity)	15
	100%

Five-year annualized return	16.8%
One-year return	36.1%
Latest quarter	13.1%



Source: First National Bank of Chicago Investment Management Group

William M. Mercer-Meidinger Inc. Summary of average bullet GIC data compound and simple rates



Source: William M. Mercer-Meidinger Inc., Louisville, Ky.

First quarter 1986 returns

	Russell 3000	Russell 1000	Russell 1000 by market capitalization				Russell 2000
			Large	Medium/large	Medium	Medium/small	
Financial services	21.0%	21.5%	29.0%	22.0%	21.6%	17.6%	15.2%
Utilities	17.1	17.1	15.9	17.5	17.4	20.4	15.5
Technology	3.5	2.9	0.5	7.2	7.4	2.8	8.3
Basic industry	19.7	20.1	19.1	22.2	19.6	18.4	17.4
Integrated oils	−3.7	−3.7	−3.1	−12.5	7.6	4.5	NA
Other energy	−8.1	−8.4	NA	−18.2	−4.9	−2.0	−6.0
Consumer staples	21.1	21.3	23.7	19.4	21.9	18.4	16.7
Consumer discretionary	17.9	18.1	17.3	19.8	17.1	17.8	16.3
Health care	23.1	23.6	22.8	21.2	41.5	24.6	18.5
Auto and transportation	22.3	22.1	30.6	18.6	16.2	23.7	25.8
Total	14.7	14.8	11.7	16.5	16.7	15.9	14.2

Source: Frank Russell Co., Tacoma, Wash.

C2710-2

Institutions putting more into mutual funds

By Ed Christman

Institutional investors pumped an estimated $35 billion into mutual funds as of March 31, but they will need more courting before they become as infatuated with mutual funds as have their individual counterparts.

The $35 billion estimated by *Pensions & Investment Age* is based on interviews with industry experts. It is more than double the Investment Company Institute's estimate of $16.9 billion as of the end of 1984.

Although mutual funds have captured only about 2.2% of all employee benefit assets, they are poised to become prime beneficiaries of the growing popularity of defined contribution plans, particularly 401(k) plans.

(Mutual fund assets totaled $495.5 billion at the end of 1985, an increase of 33.7% from the previous year's $370.7 billion, according to the Investment Company Institute. About $31.6 billion of the total comes from individual retirement accounts, about double what the institute reported a year earlier.)

Industry participants and observers predict mutual funds will grab a bigger piece of the employee benefit pie; they say the funds provide the liquidity and extensive record keeping needed in defined contribution plans that allow participants to make the asset allocation decision.

Mutual funds "are a nice fit in the defined contribution area," said Don Gingery, director of investment management research for consultant William M. Mercer-Meidinger Inc., Atlanta. "But we don't see much mutual fund business on the defined benefit side."

"The growth of defined contribution plans has opened the doorway for mutual funds," said Anthony J. Russo Jr., director of retirement planning at Lord

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Pensions & Investment Age®

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Photo by Ken Heinen

Sallie Mae relishes status as innovator

The Student Loan Marketing Association, under the leadership of Albert Lord, above, has become a favorite client of investment banking firms because of its willingness to try new financing ideas. Story on page 63.

Senate committee revision

Tax bill hits funding, benefits

By Richard J. Gillespie and Joel Chernoff

WASHINGTON — The Senate Finance Committee's revised tax overhaul proposal could slash maximum early retirement benefits for middle- and senior-level management, and impair the ability of some companies to advance fund their plans.

The bill, which is the tax-writing panel's second stab at revamping the tax code, also would curtail dramatically the advantages of individual retirement accounts for employees covered by other retirement plans, and would reduce the maximum amount employees can contribute to a 401(k) plan to $7,000 from $30,000.

The new retirement package would raise some $6 billion in revenue, without the IRA changes, during the next five years. The version the same committee had approved last month was revenue-neutral, excluding IRA changes.

The package basically retains most of the same rules adopted last month, including changes in vesting, integration and coverage standards (*Pensions & Investment Age*, April 28).

The new early retirement rules, concocted only three days before the Senate Finance Committee approved its package in a do-or-die session May 6, would sharply cut the top benefits an executive could receive if he or she retired before age 65.

The proposed rule would require the normal retirement age used by a plan be the same as that of Social Security, which is now 65 but will rise to 66 in 2005 and 67 in 2027.

For retirement prior to age 65, the maximum allowable benefit any employee could receive from a defined benefit plan would have to be reduced actuarially.

Under section 415 of the Internal Revenue Code, which governs these matters, private plans can fund for a maximum retirement benefit up to $90,000 a year as low as age 62.

The proposal would require the maximum to be reduced to $67,500 at age 62 and to $37,800 at age 55, according to Marjorie Kulash, a consultant with The Wyatt Co., Washington.

In addition, existing law allows the top benefit to be lowered to no less than $75,000 at age 55. This floor would be eliminated under the new proposal.

What's more, the new rules may discourage funding for companies that use a normal retirement age allowing employees to retire with full benefits between ages 62 and 64.

Officials of a Fortune 500 company that uses 62 as its normal retirement age estimated the proposed limits would affect about 55% of the firm's employees by the time they retire, compared with 38% under the current $90,000 limit.

But pension experts differ on how many companies use normal retirement ages below 65.

"It varies all over the lot, depending on how they want to fund" their plans, said Dallas Salisbury, president of the Employee Benefit Research Institute, Washington. The issues raised are as much "employee relations and work force planning" as funding issues, he said.

Stuart Brahs, executive director of the Association of Private Pension and Welfare

Continued on page 84

4 trusts could hold up acquisition of Eastern

By Rose Darby

MIAMI — Four employee-controlled trust funds containing roughly one-fifth of Eastern Air Line Inc.'s total outstanding stock could snag Frank Lorenzo's plans to acquire Eastern.

The first snag could be a suit by the unions attempting to force Eastern to pay for an independent expert to advise the trusts on how to vote their shares in the merger.

Texas International Airlines Inc., of which Mr. Lorenzo is president, so far claims 51% ownership of Eastern shares.

While some observers doubt the trusts — three of which are controlled by Eastern unions — can upset Mr. Lorenzo's plans, it is thought they may be able to make the acquisition more costly.

Questions remain as to whether Texas International's offer to purchase Eastern gives a fair shake to the trusts, which contain both common and a special issue of preferred stock given to union and non-contract employees in exchange for wage concessions granted in 1984.

Among the key questions:

- How, and by whom, will the preferred issues be valued?
- Will Eastern pay for independent advice to aid the trusts' review of the offer?
- Will plan trustees or participants and beneficiaries have the authority to tender the shares?

Organized labor holds bitter feelings for Mr. Lorenzo, who

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PIPER funds

Levi Strauss, maker of 501® jeans, has adopted a strict South Africa investment policy.

Levi plans trim S. Africa stocks

By Trudy Ring

SAN FRANCISCO — Levi Strauss & Co. has restricted South Africa-related investments for its defined benefit plans as well as defined contribution plans, the first corporate pension sponsor known to do so.

No employee benefit assets will be invested in stocks or bonds of companies operating in South Africa unless those companies have endorsed the Sullivan Principles and are rated in the top three categories of compliance with the principles, said Keith Williams, director-retirement investment.

The principles, developed by Philadelphia minister Leon Sullivan, call for equal treatment of all races on the job and also call on employers to work to change South Africa's system of racial segregation. Companies that endorse the principles are monitored by a consulting firm, Arthur D. Little & Co., Cambridge, Mass.

"We are attempting to limit, in a positive way, our South African investment," Mr. Williams said. Levi Strauss, which he said has a history of social involvement, adopted the policy in November.

The policy won't restrict investments severely, he said. He estimated 5% of the plans' $100 million equity holdings will have to be divested. Levi Strauss' money managers were given 18 months to divest. That probably is normal portfolio turnover time anyway, he said.

Levi Strauss has $200 million in employee benefit assets; the policy will be applied to bond holdings as well as stocks, but corporate bond holdings are very small, Mr. Williams said.

The $200 million primarily is in defined contribution plans. Levi Strauss recently terminated its two largest defined benefit plans, which had about $176 million in combined assets, Mr. Williams said. Two successor defined benefit plans won't be funded until

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Bernstein-Macaulay to stress fixed income

By Marci Baker

NEW YORK — In a major shift in business strategy, Bernstein-Macaulay Inc. is abandoning balanced and equity management in favor of a full-scale thrust into fixed-income management.

The move follows a two-year erosion of Bernstein's balanced and equity tax-exempt client base largely because of below-average investment performance and an exodus of investment talent.

News of the change surfaced with the announcement that Heath McLendon, an executive vice president at Shearson Lehman Brothers Inc. — which owns Bernstein-Macaulay — and onetime president of Bernstein, would replace Morton Richter as Bernstein's chief executive officer.

Mr. Richter also relinquished his role as chairman of the New York-based Shearson subsidiary, but will continue as a consultant. It was not known who would succeed him as chairman. Mr. Richter was recruited in 1984 by Francis "Shorty" Fraenkel, then senior executive vice president and liaison for all of Shearson's investment management units, to replace Harold Ehrlich. Mr. Richter previously had run the pension fund at Jim Walter Corp., Tampa, Fla., for about 10 years. Mr. Richter said the decision to transform Bernstein into a fixed-income specialist, made by officials at Shearson, was presented to him as a "fait accompli" May 1. "I didn't see it coming," he said.

"Bernstein is going through a reorganization that will focus the firm on fixed income," Mr. McLendon said.

The goal is to make the firm a "premier investment manager" in that area, which "implies a major de-emphasis on the equity and balanced side," he said.

It could not be determined at press time if the firm would resign its equity and balanced accounts or keep those clients while de-emphasizing the areas.

Sources said Shearson officials had approached Lehman Management Co., another Shearson investment management unit, six to 12 months ago about having Lehman take over Bernstein's equity accounts. Officials at Lehman declined; Lehman uses a more bottom-up approach to equity investing in contrast to Bernstein's top-down approach.

Lackluster performance had led Bernstein to be less successful than other units, which also include Shearson Asset Management and The Boston Co., Mr. McLendon said. Shearson is hoping new focus will make Bernstein as dynamic as the other units.

Morton Richter, former Bernstein-Macaulay CEO

Members of the investment community noted Bernstein's balanced and equity performance numbers had been in the bottom half of just about any performance measurement universe for some time.

Evaluation Associates Inc.'s investment manager profiles reported balanced account returns for the firm of 13.1% in 1983, 1.8% in 1984 and 11.9% in the first six months of 1985. The EAI median for these periods was 12.2%, 2% and 12.2%, respectively.

For straight equity, Bernstein turned in a 15.5% return for 1983, −3.5% decline for 1984 and 12.4% for the first half of 1985. This compares to medians for the EAI universe of 14.7% in 1983 and −3.3% in 1984. (Numbers for the first half of 1985 weren't available.)

But Mr. Richter said Bernstein's performance was on track, given the firm's top-down, low volatility approach in what was an up market during his tenure at the firm. Bernstein's money management style has been designed to track close to the market when stock prices are on the rise and outperform the market in down periods, he said. "Performance had been lousy

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DOL sues Equitable Life

Dispute over use of Teamster land for waste site

By Barry B. Burr

The Equitable Life Assurance Society of the United States has been sued by the Department of Labor for breach of fiduciary duty in allowing an Alabama property owned by the Teamsters, Central States, Southeast & Southwest Areas pension fund to be used for hazardous waste facilities.

Equitable, based in New York, also is involved in a dispute with the Central States Teamsters fund, Chicago, over the use of a property in New Jersey for the handling of hazardous waste.

The disputes could have broad implications for pension funds that invest in real estate and other physical assets, according to an attorney who isn't involved with the cases.

Roger C. Siske, partner with the Chicago law firm of Sonnenschein, Carlin, Nath & Rosenthal, suggested the disputes demonstrate the potential vulnerability to liability claims pension funds might have from owning real assets, even though their holdings might be managed and occupied by other firms.

Both the Alabama property involved in the suit by the Labor Department and the New Jersey property were managed by Equitable on behalf of the Teamsters fund, when the insurer was the fund's fiduciary.

Officials of the Teamsters and the Labor Department, in separate actions, contend Equitable placed the nearly $6 billion pension fund in jeopardy, exposing it to potential liability for damage and clean-up of the hazardous wastes.

In the Alabama dispute, Secretary of Labor William E. Brock filed suit April 25 in U.S. District Court in Washington, claiming Equitable "breached its fiduciary obligations" under the Employee Retirement Income Security Act.

The suit claims Equitable permitted Chemical Waste Management Inc., a unit of Waste Management Inc., both of Oak Brook, Ill., to sublease part of the Central States property as a facility for hazardous wastes, including PCBs, or polychlorinated biphenyls.

The Labor Department cites Equitable in the suit for allowing the sublease without first conducting appropriate inspections and analyses "to protect other assets of the fund against loss from potential liability in connection with the CWM sublease."

The suit claims Equitable failed to consider and evaluate properly the pension fund's exposure to potential liability in the event of a hazardous waste spill, even though the insurer was given a copy of Chemical Waste's sublease, providing expressly that the property "shall be used exclusively by (the) tenant as a tank terminal storage and transfer facility for hazardous wastes."

In a release, the Labor Department noted that in the event of a hazardous spill, "the Comprehensive Environmental

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LTV board asked to buy stock

By Marci Baker

DALLAS — Each member of The LTV Corp.'s board of directors would be required to buy at least $10,000 worth of LTV common stock under a shareholder resolution expected at the company's annual meeting May 16.

Carl Olson, of Tolouka Lake, Calif., has made the proposal. The management of LTV, apparently the first company ever to be faced with such a proposition, opposes it.

Mr. Olson, who owns 200 shares of LTV common stock, believes LTV's 70,000 shareholders deserve to think of the board of directors as "one of us," according to the proxy statement outlining the proposal.

"Directors should have a major stake in the financial health and productivity of the corporation. Their fortunes should be at stake while they serve as directors," he said in the proxy statement.

According to the proxy statement, Mr. Olson thinks a $10,000 stake is a "very reasonable amount" considering LTV directors oversee a multibillion-dollar corporation.

The LTV board is asking shareholders to vote against the proposal because it would disqualify individuals with special expertise, such as academics or union members, who could not afford to purchase that much stock from board membership, an LTV spokesman said.

Money, however, is not an issue for LTV's current 10 directors, virtually all of whom are current or retired chairmen or chief executive officers of other major corporations.

Four of those directors, including William Bricker, chairman of Diamond Shamrock Corp., and Maurice Granville, the retired chairman of Texaco Inc., own less than $10,000 of common stock, based on recent market prices.

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Dubuque Packing, PBGC accord seen

By Joel Chernoff

The Pension Benefit Guaranty Corp., the Dubuque Packing Co. and the company's meatpacking union are moving rapidly toward resolving who will pay for millions of dollars in unfunded liabilities for the company's pension plan, with a settlement possible this week.

The pension plan, which covers workers terminated when the company's Dubuque plant was sold in 1982, has liabilities for benefits estimated as high as $85 million. The current asset figure was unavailable.

What's more, how one element of the retirement plan issue is resolved could result in imposing liabilities on the company of hundreds of millions of dollars for unfunded medical benefits for retirees.

The retirement plan negotiations involve not only unfunded liabilities for benefits guaranteed by the PBGC, but also additional benefits an arbitrator has ruled the company must fund before being able to terminate the plan.

To avoid a court ruling that could set a dangerous precedent for the PBGC and the union, as well as an unaffordable cost for the company, the parties are swiftly drawing closer to settlement.

The PBGC and the union, Local 150A of the United Food and Commercial Workers, Dubuque, Iowa, were scheduled to meet last Friday to try to divide the amount the company is offering between PBGC-guaranteed and non-guaranteed benefits. The size of the settlement being offered was not disclosed, but is expected to be far short of the potential liabilities.

Any remaining liabilities not funded by the settlement for guaranteed benefits would be assumed by the PBGC; however, non-guaranteed benefits only would be funded to the extent

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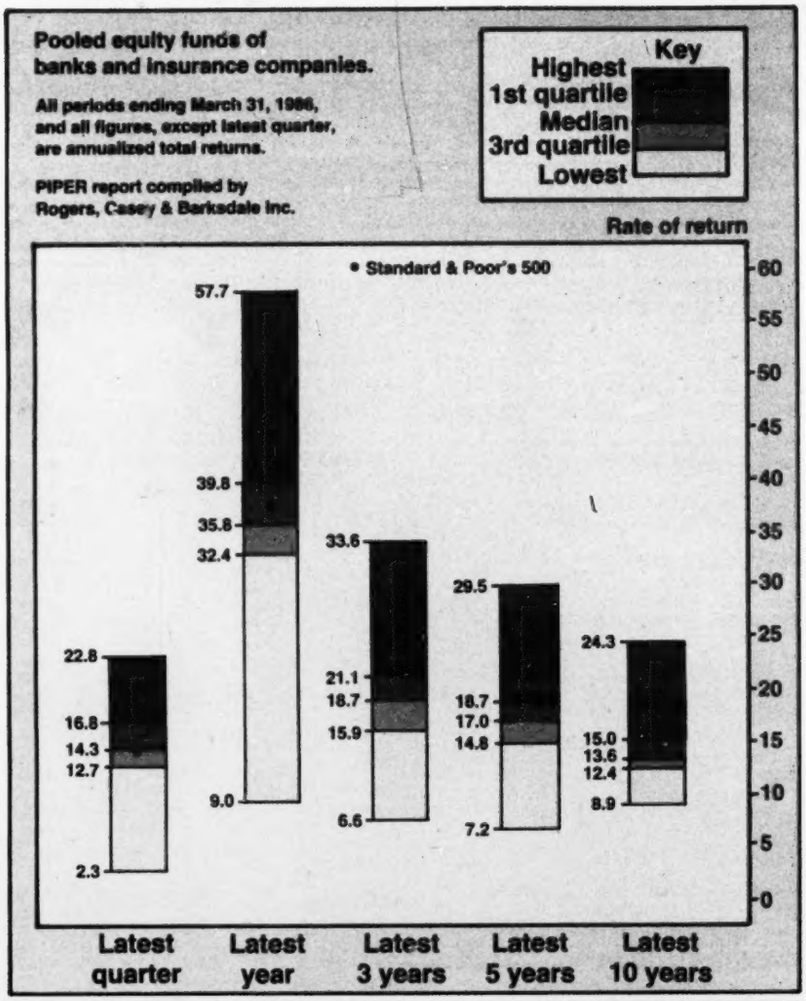
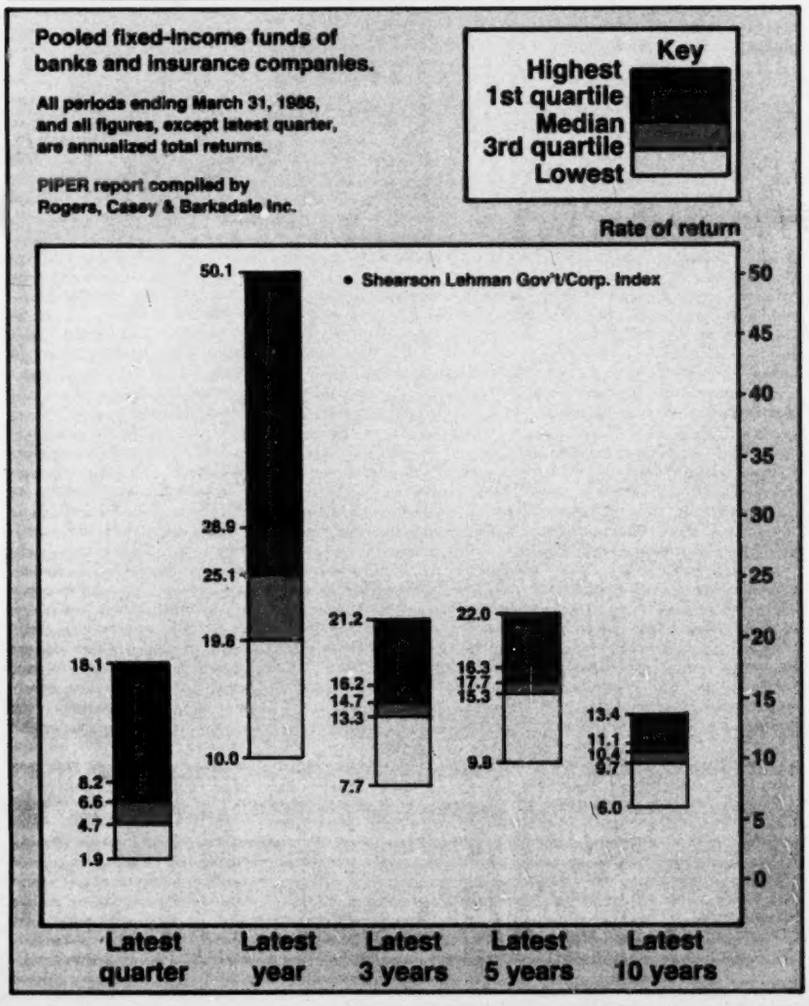
PIPER

The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. PIPER details comparative performance data on equity and fixed-income funds at more than 200 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.





Top managers aided by longer Treasuries

By Barry B. Burr

The best-performing fixed-income managers tracked by Pensions & Investments' Performance Evaluation Report in the first quarter favored medium- and long-term Treasury securities.

At Equitable Life Assurance Society of the United States, New York, Frank J. Scott Jr., vice president, said he kept buying longer maturities for his more than $220 million bond portfolio during the quarter.

"I kept lengthening it as I became convinced oil prices would continue to fall," said Mr. Scott, who was once an oil analyst.

His portfolio ranked as the leading fixed-income fund in PIPER, returning 18.1% in the quarter. By contrast the Shearson Lehman Government/Corporate bond index returned 8.5% in the same period.

Falling oil prices "would lower inflation considerably," dampen interest rates and boost bond prices, Mr. Scott said.

The Equitable portfolio was invested 100% in Treasury securities, he said.

Its duration was lengthened to 10 to 10½ years by the end of March from five to 5½ years in January, he added.

In the second quarter, he has gotten more bullish on bond prices. At the end of April, about 80% of the portfolio was in maturities of 30 years, up from about 70% at the end of the quarter.

Despite stellar performances of a few fixed-income funds, the Shearson Lehman index beat most funds handily in all periods, according to PIPER.

- In the first quarter, of 315 funds tracked by PIPER, only 44 bettered and four tied the index's 8.5% return. The median return was 6.6%.
- In the 12 months ended March 31, 63 of 263 funds bettered — and two tied — the index's 28.9% return. The median return was 25.1%.
- In the three years ended March 31, 37 of 205 funds bettered — and four tied — the index's 16.6% return. The median return was 14.7%.
- In the five-year period of 226 funds, 45 bettered and three tied the index's 18% return. The median return was 16.3%.
- In the 10 years, of 228 funds, 51 bettered and five tied the index's 10.9% return. The median return was 10.4%.

The first quarter and one year results are actual returns; the results for three, five and 10 years are annualized time-weighted returns.

The $100 million fund of Centerre Trust Co., St. Louis, ranked second in the quarter, returning 15.6%.

Explaining the rise in bond prices, Robert J. Franklin, Centerre senior vice president, said, "The future expectation of inflation dropped dramatically during the quarter."

He said the quarter began with very high real, or after-inflation, interest rates, with 30-year Treasury bonds yielding 9⅛%, compared with an inflation rate of 3½%. By the end of March, he said, the Treasury rate fell to 7½%, while inflation fell to near zero, leaving room for possibly further declines in interest rates.

Unlike some other top performers in the quarter, Mr. Franklin said Centerre had a large holding of corporate securities, about 30% of the portfolio.

About 10% was in Treasury zero-coupon securities, mostly of 20-year maturities, which he said did well as rates declined.

The poorest performing sector of the portfolio was its mortgage-backed securities, about 20% of the portfolio.

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Large-cap funds lead equity performance

By Trudy Ring

Pooled bank and insurance company equity funds concentrated in large-capitalization issues were big winners in the 12 months ended March 31 and in other periods covered by the Pensions & Investments' Performance Evaluation Report.

Some small-cap funds joined the large-cap ones in the top ranks for longer periods in the survey. Small-cap stocks have been out of favor in the past few years.

The median PIPER equity fund underperformed the Standard & Poor's 500 stock index in the one-year, three-year and five-year periods of the survey, while outperforming it slightly in the 10-year period and in the latest quarter.

In the year ended March 31, the median fund returned 35.8%, while the index returned 37.7%. In the three-year period, the median fund had a compound annual return of 18.7%, while the index returned 21.2%. The five-year annualized return was 17% for the median fund, 17.5% for the index.

In the 10-year period, the median fund returned 15% on an annual basis, while the S&P 500 returned 14.3%. In the first quarter of 1986, the median fund returned 14.3% and the index returned 14.1%.

The top performer for the 12-month, three-year and five-year periods was Sun Banks Inc., Orlando, Fla.

Its equity fund returned 57.7% for the year and had a compound annual return of 33.6% for the three-year period and 29.5% for the five-year span. It also ranked in the top decile in the 10-year period ended March 31, with an 18.2% compound annual return, and in the latest quarter, with a 19.1% gain.

About $130 million is invested in Sun Bank's fund, which is concentrated in large-cap, well-known companies with above-average growth rates, said Anthony R. Gray, executive vice president.

"We take big positions in industries we like, but no position in industries we don't like," Mr. Gray said. "We are not a closet indexer."

It has heavy positions in property and casualty insurance companies, regional banks, service companies, food companies and drug firms, he said. It has no energy stocks and has not had any for at least five years, he said.

Some of the fund's biggest individual stock holdings are **Digital Equipment Corp., Aetna Life & Casualty Co., Chubb Corp., American Express Co., Merck & Co. Inc., Petrie Stores Corp.** and **Ralston Purina Co.**

The fund also has an above-average stock turnover, about 250% a year, Mr. Gray said. He said the turnover has added almost 15 percentage points a year to the fund's return.

Another large-cap fund that did well in the year ended March 31 was Boston-based

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Top quartile commingled equity funds
3-month returns

	%
New England Mutual, Mass.	22.8
Pittsburgh Natl. (QMS), Pa.	22.7
First Trust Corp., Colo.	22.2
Citizens Chillicothe (No. 2), Mo.	22.0
Bank of Delaware	21.7
Pittsburgh Natl. (QMS), Pa.	21.4
Omaha National Bank, Neb.	21.1
First Bank Milwaukee	21.0
Security Pacific (Fund E), Calif.	20.8
First of Neenah, Wis.	20.8
Texas Commerce	20.8
Northern Trust, Ill.	20.5
Puget Sound Natl., Wash.	20.4
County Bank of St. Louis	20.1
United of Denver	20.0
Guardian Insurance (No. 1), N.Y.	19.7
Equitable Life (No. 4), N.Y.	19.4
Sun Bank, Fla.	19.1
Harris Trust, Ill.	19.1
New Jersey National	18.9
Merchants Natl. (Fund I), Ind.	18.8
First Security Natl. (Fund D), Ky.	18.8
Continental Bank, Pa.	18.7
National Bank of Commerce, Neb.	18.7
First Interstate of Denver	18.6
NCNB National Bank, N.C.	18.5
South Carolina National	18.4
State Natl., Evanston, Ill.	18.3
First Fidelity, N.J.	18.3
Chemical Bank (No. 2), N.Y.	18.2
Bank of Virginia, Va.	18.2
Pacific Mutual, Calif.	18.1
First Natl. of Commerce, La.	18.1
HT Investors, R.I.	18.0
Northern Trust, Ill.	18.0
Barnett Banks Trust Co., Fla.	17.9
California First Bank	17.9
First of Toledo, Ohio	17.9
First of Neenah, Wis.	17.9
American National Bank, Ind.	17.8
Mercantile Trust, Mo.	17.7
Manufacturers Detroit, Wis.	17.7
Sentry Life (Acct. E), Wis.	17.7
American National Bank, Ind.	17.7
Liberty National, Okla.	17.5
First of Oklahoma	17.5
Comerica Bank, Mich.	17.5
New England Mutual, Mass.	17.5
Harris Trust, Ill.	17.3
US Natl. of Oregon	17.3
Mutual of America (No. 2), N.Y.	17.3
MTrust, Texas	17.3
Crown Life, Ont.	17.3
State Street Bank (Fund I), Mass.	17.3
Associated Kellogg, Wis.	17.2
Great West Life Assurance, Man.	17.2
Employers Life of Wausau (1)	17.2
Manufacturers Hanover, N.Y.	17.1
Summit Trust Co., N.J.	17.0
Old Second Natl., Ill.	17.0
Philadelphia National, Pa.	16.9
Republic Natl., Dallas	16.9
Chase Manhattan (Fund B), N.Y.	16.9
Chemical Bank (No. 1), N.Y.	16.9
Key Trust Co., N.Y.	16.8
Equitable Bank, Md.	16.8
Mellon Bank, Pa.	16.8
Security Natl. Bank, W. Va.	16.8
Indiana National Bank	16.8
Seattle Trust, Wash.	16.8
Standard & Poor's 500	**14.1**

Foundations and endowments spotlighted June 9.

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	%
Sun Bank, Fla.	57.7
American National, Chicago	46.1
Natl. City, Cleveland	44.1
Texas Commerce	44.0
Republic National, Dallas	43.8
Philadelphia National	43.4
Manufacturers Detroit	42.4
Mellon Bank, Pa.	41.4
John Hancock (1L), Mass.	41.4
Equitable Life (No. 4), N.Y.	41.2

$50 million to $100 million

	%
New England Mutual, Mass.	54.3
New York Life Ins. (Acct. 1)	51.1
First Interstate of Denver	46.3
Continental Bank, Pa.	45.8
Liberty National, Okla.	44.1
Interfirst Bank, Dallas	42.8
Harris Trust, Ill.	41.8
Fidelity Bank, Pa.	41.1
Crocker National (S), Calif.	40.9
First of Boston	40.8

$10 million to $50 million

	%
First Trust Corp., Colo.	52.4
Mutual of America (No. 2)	51.6
South Carolina Natl.	51.1
Northern Central, Pa.	50.5
Bank of Virginia	48.7
Security Pacific (E), Calif.	48.0
Omaha National Bank	47.8
New Jersey National	47.3
Nationwide Life Ins., Ohio	47.1
First of Neenah, Wis.	46.8

Under $10 million

	%
Puget Sound Natl., Wash.	50.8
Lincoln Natl., Ind.	50.4
Pittsburgh Natl. (QMS), Pa.	49.1
First of Neenah, Wis.	49.0
Pioneer Bank, Ill.	48.4
Northern States Trust Co., Ill.	42.1
American Natl. Bank, Ind.	40.4
American Natl. Bank (G), Ind.	39.8
Old Second Natl., Ill.	39.7
First United Trust Co. (G), Ill.	39.1

10-year returns
Over $100 million

	%
First Wisconsin Natl.	20.3
US Natl. of Oregon	19.1
Bessemer Trust, N.Y.	18.4
Provident Natl., Pa.	18.4
First Union Bank, N.C.	18.2
Sun Bank, Fla.	18.2
Equitable Life (No. 4), N.Y.	17.4
MTrust, Texas	17.2
Manufacturers Detroit	17.2
Bankers Life, Iowa	17.1

$50 million to $100 million

	%
Manufacturers Life, Ont.	24.3
First Interstate of Denver	18.1
New England Mutual, Mass.	18.0
Continental Bank, Pa.	17.1
AmSouth, Ala.	17.0
First Jersey Natl., N.J.	16.6
Fifth Third Bank, Ohio	16.1
First Interstate of Oregon	16.1
Liberty Natl., Okla.	15.8
Chicago Title & Trust, Ill.	15.5

$10 million to $50 million

	%
Guardian Insurance (No. 1)	22.2
First Trust Corp., Colo.	20.3
US Natl. of Galveston	20.3
Citizens Chillicothe (B), Mo.	19.6
First Variable Life, Ark.	18.8
State Natl., Evanston, Ill.	18.3
First of Oklahoma	18.1
Nationwide Life Ins., Ohio	17.8
Confederation Life, Ont.	17.8
Natl. Bank of Commerce	17.6

Under $10 million

	%
Pittsburgh Natl. (QMS), Pa.	16.1
Wheeling Dollar Bank	15.9
First of Neenah, Wis.	14.9
Union Central, Ohio	14.6
Unibanctrust, Ill.	14.5
First of Warsaw, Ind.	14.0
Old Second Natl., Ill.	13.9
Landmark First Natl., Fla.	13.7
Lincoln National, Ind.	13.6
Oregon Bank	13.5

1-year returns

	%
Sun Bank, Fla.	57.7
New England Mutual, Mass.	54.3
First Trust Corp., Colo.	52.4
Mutual of America (No. 2), N.Y.	51.6
South Carolina Natl.	51.1
New York Life Ins. (Acct. 1)	51.1
Puget Sound Natl., Wash.	50.8
Northern Central, Pa.	50.5
Lincoln National, Ind.	50.4
Pittsburgh Natl. (QMS), Pa.	49.1
First of Neenah, Wis.	49.0
Bank of Virginia	48.7
Pioneer Bank, Ill.	48.4
Security Pacific (Fund E), Calif.	48.0
Omaha Natl. Bank, Neb.	47.8
New Jersey National	47.3
Nationwide Life Ins., Ohio	47.1
First of Neenah, Wis.	46.8
First Interstate of Denver	46.3
Summit Trust Co., N.J.	46.1
American Natl., Chicago	46.1
Continental Bank, Pa.	45.8
Pittsburgh Natl. (QMS), Pa.	45.6
First Bank Milwaukee	45.4
State Natl., Evanston, Ill.	45.2
First Security Natl. Bank (D), Ky.	45.0
Merchants Natl. (I), Ind.	44.8
Seattle Trust, Wash.	44.6
Harris Trust, Ill.	44.2
Citizens Chillicothe (Fund B), Mo.	44.2
Liberty National, Okla.	44.1
Natl. City Cleveland, Ohio	44.1
Texas Commerce	44.0
Republic Natl., Dallas	43.8
Philadelphia Natl., Pa.	43.4
Riggs of Washington	42.8
Interfirst Bank Dallas	42.8
First of Toledo, Ohio	42.7
Pacific Mutual, Calif.	42.7
Valley National (I), Ariz.	42.6
Guardian Insurance (No. 1), N.Y.	42.5
First Kentucky Trust	42.4
Manufacturers Detroit	42.4
Barnett Banks Trust Co., Fla.	42.2
Northern States Trust Co., Ill.	42.1
Harris Trust, Ill.	41.8
First of Oklahoma	41.6
Mellon Bank, Pa.	41.4
John Hancock (1L), Mass.	41.4
California First Bank	41.2
United of Denver, Colo.	41.2
Equitable Life (No. 4), N.Y.	41.2
Fidelity Bank, Pa.	41.1
Crocker Natl. (Fund S), Calif.	40.9
CREF	40.8
First of Boston, Mass.	40.8
First Fidelity Bank, N.J.	40.6
State Street Bank (Fund I), Mass.	40.6
American National Bank, Ind.	40.4
Chemical Bank (Fund 2), N.Y.	40.3
Citizens Fidelity (E), Ky.	40.2
Bankers Life, Iowa	40.1
State Street Bank, Mass.	40.1
Associated Kellogg, Wis.	40.0
NCNB National Bank, N.C.	39.9
County Bank of St. Louis	39.9
Great East Life Assur., Man.	39.8
Trust Svcs of Amer., Calif.	39.8
Norwest Bank, Minn.	39.8
American Natl. Bank, Ind.	39.8
Standard & Poor's 500	**37.7**

3-year returns

	%
Sun Bank, Fla.	33.6
Bank of New England, Mass.	28.3
Guardian Ins. (No. 1), N.Y.	28.0
First Interstate of Oregon	27.5
MTrust, Fort Worth	27.4
LaSalle National, Ill.	27.0
New Jersey National	26.8
Northern States Trust Co., Ill.	26.2
Republic Natl., Dallas	25.9
Nationwide Life Ins., Ohio	25.6
Manufacturers Detroit	25.5
Provident National, Pa.	25.4
Mellon Bank, Pa.	25.3
State Natl., Evanston, Ill.	25.2
Prudential, N.J.	25.1
First Union Bank, N.C.	24.9
First Trust Corp., Colo.	24.7
Bank of the West, Calif.	24.6
First of Neenah, Wis.	24.2
Lincoln National, Ind.	23.9
First of Omaha (Fund D), Neb.	23.8
John Hancock (1L), Mass.	23.7
First of Neenah, Wis.	23.6
Mercantile Trust, Mo.	23.5
US Natl. of Galveston, Texas	23.4
American Natl., Chicago	23.4
New York Life Ins. (Acct. 1)	23.3
First Jersey Natl., N.J.	23.2
Bank of Virginia	23.2
Mercantile Safe, Md.	23.1
US Trust, N.Y.	22.9
Fidelity Mgmt. Trust, Mass.	22.8
Old Kent, Mich.	22.7
John Hancock (1K), Mass.	22.6
Continental Bank, Pa.	22.6
Frost Natl. (Fund A), Texas	22.4
Natl. Bank of Commerce, Tenn.	22.4
Citytrust, Conn.	22.4
Lake Shore Natl., Ill.	22.3
AmeriTrust, Ohio	22.2
Massachusetts Mutual	22.2
Pittsburgh Natl. (QMS), Pa.	22.2
CREF	22.2
New England Mutual, Mass.	22.0
Pioneer Bank, Ill.	22.0
Barnett Banks Trust Co., Fla.	21.9
Central Penn, Pa.	21.9
First of Warsaw, Ind.	21.8
Mutual Service Life (8), Minn.	21.8
Dauphin Deposit, Pa.	21.7
Bankers Trust, N.Y.	21.6
Texas Commerce	21.6
Fidelity Bank, Pa.	21.6
Colorado National Bank	21.5
Oregon Bank	21.5
Bankers Life, Iowa	21.5
First Pennsylvania Bank	21.3
American Natl., Chicago	21.2
Marine Midland, N.Y.	21.2
Standard & Poor's 500	**21.2**

Master trust profiles: June 23.

5-year returns

	%
Sun Bank, Fla.	29.5
First Union Bank, N.C.	25.6
Manufacturers Life, Ont.	25.0
Guardian Insurance (Acct. 1), N.Y.	24.0
Manufacturers Detroit	23.5
New England Mutual, Mass.	23.0
Nationwide Life Ins., Ohio	22.9
First Variable Life, Ark.	22.5
Resource Bank & Trust, Minn.	22.3
Pioneer Bank, Ill.	22.2
Dauphin Deposit, Pa.	21.9
First Fidelity Bank, N.J.	21.8
First Interstate of Oregon	21.7
United of Denver	21.7
Bank of Virginia	21.6
Lake Shore National, Ill.	21.5
New Jersey National	21.5
US Natl. of Galveston, Texas	21.5
American Natl., Chicago	21.4
First of Oklahoma	21.3
AmSouth, Ala.	21.3
MTrust, Fort Worth, Texas	21.1
Prudential, N.J.	21.1
First of Omaha (Fund D), Neb.	21.0
Provident National, Pa.	21.0
First Security Natl. Bank (D), Ky.	20.9
Barnett Banks Trust Co., Fla.	20.9
Connecticut Mutual Life	20.9
US Natl. of Oregon	20.8
Bank of the West, Calif.	20.5
Seattle Trust, Wash.	20.4
First Wis. Natl., Madison	20.1
Massachusetts Mutual	19.9
Mid-State Bancorp, Pa.	19.9
John Hancock (1L), Mass.	19.9
First Bank, Milwaukee	19.8
Colorado National Bank	19.8
Texas Commerce	19.7
Midlantic National, N.J.	19.5
First Wisconsin Trust	19.5
Republic National, Dallas	19.4
Confederation Life, Ont.	19.3
First Trust Corp., Colo.	19.3
First of Warsaw, Ind.	19.3
Natl. Bank of Commerce, Tenn.	19.2
First Pennsylvania Bank	19.2
Bank of Tokyo, N.Y.	19.2
First Tennessee, Memphis	19.2
Old Kent, Mich.	19.1
Union Central, Ohio	19.1
Southeast Bank NA, Fla.	19.0
State Natl., Evanston, Ill.	19.0
MTrust, Texas	18.9
First of Neenah, Wis.	18.9
Fifth Third Bank, Ohio	18.8
Continental Bank, Pa.	18.8
Gary Wheaton Bank, Ill.	18.8
Mercantile Safe, Md.	18.8
Society National, Ohio	18.7
AmeriTrust, Ohio	18.7
Wheeling Dollar Bank, W. Va.	18.7
First Kentucky Trust	18.7
Shawmut Bank, Mass.	18.7
Standard & Poor's 500	**17.5**

10-year returns

	%
Manufacturers Life, Ont.	24.3
Guardian Insurance (No. 1), N.Y.	22.2
First Trust Corp., Colo.	20.3
US Natl. of Galveston, Texas	20.3
First Wisconsin Natl., Madison	20.3
Citizens Chillicothe (B), Mo.	19.6
US Natl. of Oregon	19.1
First Variable Life, Ark.	18.6
Bessemer Trust, N.Y.	18.4
Provident National, Pa.	18.4
State Natl., Evanston, Ill.	18.3
First Union Bank, N.C.	18.2
Sun Bank, Fla.	18.2
First Interstate of Denver	18.1
First of Oklahoma	18.1

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*Based on Risk Return Performance Comparisons report issued by Frank Russell Company for Investment Advisor Separate Accounts and Balanced Separate Accounts for five years ending 12/31/85. Universe includes over 120 portfolios.

New England Mutual, Mass.	18.0
Nationwide Life Ins., Ohio	17.8
Confederation Life, Ont.	17.8
Natl. Bank of Commerce, Neb.	17.6
First of Omaha (Fund D), Neb.	17.5
Equitable Life (No. 4), N.Y.	17.4
MTrust, Texas	17.2
Manufacturers Detroit	17.2
MTrust, Fort Worth, Texas	17.2
United of Denver, Colo.	17.2
Continental Bank, Pa.	17.1
Bankers Life, Iowa	17.1
Employers Life of Wausau (1)	17.1
Massachusetts Mutual	17.0
AmSouth, Ala.	17.0
Bank of Virginia	16.9
First Jersey Natl., N.J.	16.6
Aetna Life & Casualty, Conn.	16.5
First Interstate of Nevada	16.5
IAA Trust Co. (Fund C), Ill.	16.4
Penn Mutual Life (Acct. A), Pa.	16.4
National City Cleveland	16.3
Fifth Third Bank, Ohio	16.1
First Interstate of Oregon	16.1
Pittsburgh Natl. (QMS), Pa.	16.1
First Interstate of Wash.	16.0
Texas Commerce	16.0
Valley Fidelity, Tenn.	16.0
Wheeling Dollar Bank, W. Va.	15.9
First National, Lincoln, Neb.	15.9
Liberty National, Okla.	15.8
Bank of Tokyo, N.Y.	15.7
Home Life, N.Y.	15.6
Chicago Title & Trust, Ill.	15.5
Philadelphia National	15.5
Colorado National Bank	15.4
Citytrust (E1), Conn.	15.0
First Natl. of Commerce, La.	15.0
Republic National, Dallas	15.0
First Pennsylvania Bank	15.0
New Jersey National	15.0
Standard & Poor's 500	**14.3**

Top quartile commingled fixed-income funds

3-month returns

	%
Equitable Life (No. 5), N.Y.	18.1
Centerre Trust, Mo.	15.6
Manufacturers Life, Ont.	14.4
Chase Manhattan, N.Y.	13.8
Union Labor Life (Acct. F), D.C.	13.4
First Interstate of Denver	12.7
First Interstate of Wisconsin	12.5
LaSalle National, Ill.	12.3
CIGNA Corp., Conn.	12.0
Fidelity Bank, Pa.	12.0
United of Denver	11.7
Hawaiian Trust	11.6
Metropolitan Life (No. 41), N.Y.	11.6
Travelers (Acct. P), Conn.	11.3
Republic National, Dallas	10.5
Citicorp, N.Y.	10.4
MTrust, Texas	10.1
First Trust Corp, Colo.	9.8
Continental Illinois	9.7
John Hancock, Mass.	9.6
First Wisconsin Trust	9.5
Trust Co. of Georgia	9.4
Key Trust Co., N.Y.	9.4
Omaha National Bank, Neb.	9.3
Manufacturers Hanover, N.Y.	9.3
Natwest USA, N.Y.	9.2
Comerica Bank, Mich.	9.2
Bankers Life, Iowa	9.2
Citizens & Southern, Ga.	9.1
First Interstate of Ariz.	9.1
American Security, D.C.	9.1
Chase Manhattan (A), N.Y.	8.9
Boatmen's FNB, K.C., Mo.	8.8
Crocker Natl. (Fund R), Calif.	8.8
Natl. Bank of Commerce, Neb.	8.8
First Union Bank (Fund 1), N.C.	8.7
Liberty National, Ky.	8.7
HT Investors (Fund A), R.I.	8.7
Boatmen's National, Mo.	8.7
AmSouth, Ala.	8.7
Northern Trust, Ill.	8.6
Chemical Bank (2), N.Y.	8.6
First Jersey Natl., N.J.	8.6
Harris Trust, Ill.	8.6
IAA Trust Co. (Fund B), Ill.	8.5
Shawmut Bank, Mass.	8.5
Shearson Lehman Index	**8.5**
Prudential (VCA 7), N.J.	8.5
Connecticut National Bank	8.5
Lincoln National Pens., Ind.	8.4
Connecticut National Bank	8.4
American National Bank, Ind.	8.4
Mellon Bank, Pa.	8.4
American National, Minn.	8.4
Sovran Bank, Va.	8.4
Aetna Life & Casualty (76), Conn.	8.3
First Interstate of Wash.	8.3
Union National, Wichita, Kan.	8.3
Pacific Mutual, Calif.	8.3
Maryland National	8.3
National Bank of Detroit	8.3
Philadelphia National	8.3

Top fixed funds by size

1-year returns

Over $100 million

	%
Equitable Life (No. 5), N.Y.	42.8
CIGNA Corp., Conn.	35.8
Life of Virginia	34.5
Bankers Life, Iowa	34.5
John Hancock, Mass.	33.4
American Security, D.C.	32.7
Aetna Life & Cas. (76) Conn.	32.4
Chase Manhattan (A), N.Y.	31.6
Harris Trust, Ill.	31.1
Manufacturers Hanover, N.Y.	30.8

$50 million to $100 million

	%
Centerre Trust, Mo.	50.1
First Interstate of Denver	42.9
Travelers (P), Conn.	39.3
Metropolitan Life (41), N.Y.	38.5
Trust Co. of Georgia	32.7
Comerica Bank, Mich.	32.4
Continental Illinois	31.9
MTrust, Texas	31.1
Bankers Trust (Fund A), N.Y.	30.3
First Union Bank (Fund 1)	30.3

$10 million to $50 million

	%
United of Denver	47.3
Hawaiian Trust	39.2
Republic Natl., Dallas	37.9
Fidelity Bank, Pa.	36.2
Natl. Bank of Commerce	32.8
AmSouth, Ala.	32.8
Connecticut Natl. Bank	31.9
Security Pacific (F), Calif.	31.7
Trust Svcs of Amer., Calif.	31.3
Omaha National Bank	31.1

Under $10 million

	%
Manufacturers Life, Ont.	45.4
LaSalle Natl., Ill.	41.4
Connecticut Natl. Bank	36.0
First Trust Corp., Colo.	33.8
First Interstate of Wis.	32.9
First Interstate of Ariz.	31.9
Maryland National	31.7
Natwest USA, N.Y.	31.6
Key Trust Co., N.Y.	31.0
IAA Trust Co. (Fund B), Ill.	30.2

10-year returns

Over $100 million

	%
Life of Virginia	13.4
Texas Commerce	12.6
American Security, D.C.	12.4
Manufacturers Hanover, N.Y.	12.2
Boatmen's National, Mo.	11.8
CIGNA Corp., Conn.	11.8
Mercantile Trust, Mo.	11.7
John Hancock, Mass.	11.5
Wachovia Bank, N.C.	11.0
NCNB Natl. Bank, N.C.	10.8

$50 million to $100 million

	%
Centerre Trust, Mo.	13.3
Sovran Bank, Va.	13.2
Hibernia Natl., La.	12.5
First Interstate of Den.	12.0
Manufacturers Detroit	11.5
Bankers Tr. (B), N.Y.	11.3
US Trust, N.Y.	11.2
Mellon Bank, Pa.	11.2
Bankers Tr. (A), N.Y.	11.2
Amer. Natl., Chicago	11.0

$10 million to $50 million

	%
Bank IV, Wichita, Kan.	13.3
United of Denver	13.0
Fidelity Bank, Pa.	12.8
Pacific Mutual, Calif.	12.8
First Jersey Natl., N.J.	12.7
Seafirst Bank, Wash.	12.4
First Interstate of Calif.	12.2
First Kentucky Trust	11.9
First Wis. Natl., Madison	11.8
American Natl. Bank, Tenn.	11.5

Under $10 million

	%
Beverly Bank, Ill.	12.6
Central Fidelity, Va.	12.1
First Interstate of Ariz.	11.8
Key Trust Co., N.Y.	11.3
Connecticut Natl. Bank	11.3
Oregon Bank	11.2
First of Maryland	11.1
IAA Trust Co. (Fund B), Ill.	11.0
Union Planters, Tenn.	10.9
First of Neenah, Wis.	10.9

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First Kentucky Trust	8.2
First Variable Life, Ark.	8.2
First Fidelity Bank, N.J.	8.2
First Bank Milwaukee	8.2
Bank of California	8.2

1-year returns

	%
Centerre Trust, Mo.	50.1
United of Denver	47.3
Manufacturers Life, Ont.	45.4
First Interstate of Denver	42.9
Equitable Life (No. 5), N.Y.	42.8
LaSalle National, Ill.	41.4
Travelers (Acct. P), Conn.	39.3
Hawaiian Trust	39.2
Metropolitan Life (No. 41), N.Y.	38.5
Republic National, Dallas	37.9
Fidelity Bank, Pa.	36.2
Connecticut National Bank	36.0
CIGNA Corp., Conn.	35.8
Citicorp, Conn.	34.7
Life of Virginia	34.5
Bankers Life, Iowa	34.5
First Trust Corp., Colo.	33.8
John Hancock, Mass.	33.4
First Interstate of Wis.	32.9
Natl. Bank of Commerce, Neb.	32.8
AmSouth, Ala.	32.8
American Security, D.C.	32.7
Trust Co. of Georgia	32.7
Aetna Life & Casualty (76), Conn.	32.4
Comerica Bank, Mich.	32.4
Continental Illinois	31.9
Connecticut National Bank	31.9
First Interstate of Arizona	31.9
Maryland National	31.7
Security Pacific, Calif.	31.7
Natwest USA, N.Y.	31.6
Chase Manhattan (A), N.Y.	31.6
Trust Svcs of Amer., Calif.	31.3
MTrust, Texas	31.1
Harris Trust, Ill.	31.1
Omaha National Bank, Neb.	31.1
Bessemer Trust, N.Y.	31.0
Key Trust Co., N.Y.	31.0
Manufacturers Hanover, N.Y.	30.8
First Jersey National, N.J.	30.8
Society National, Ohio	30.7
Liberty National, Ky.	30.4
First Kentucky Trust	30.3
Bankers Trust (Fund A), N.Y.	30.3
First Union Bank (Fund 1), N.C.	30.3
Bank of California	30.3
IAA Trust Co. (Fund B), Ill.	30.2
Lincoln Natl. Pens., Ind.	30.2
Morgan Guaranty, N.Y.	30.1
Chemical Bank (No. 2), N.Y.	29.8
Crocker National (Fund R), Calif.	29.8
Natl. City Cleveland	29.8
Northern Trust, Ill.	29.8
Sovran Bank, Va.	29.8
First of Omaha (Fund C)	29.8
American National, Minn.	29.7
Massachusetts Mutual	29.7
Beverly Bank, Ill.	29.7
Provident National, Pa.	29.5
Chase Manhattan, N.Y.	29.3
Bank of America, Calif.	29.1
National Bank of Detroit	29.1
Colorado National Bank	29.1
Philadelphia National, Pa.	28.9
Wachovia Bank, N.C.	28.9
Shearson Lehman Index	**28.9**

3-year returns

	%
Centerre Trust, Mo.	21.2
United of Denver	21.0
Security Pacific (V), Calif.	20.9
Equitable Life (No. 5), N.Y.	20.0
First Interstate of Denver	19.8
IAA Trust Co. (Fund B), Ill.	18.9
Life of Virginia	18.8
Travelers (Acct. P), Conn.	18.7
Connecticut National Bank	18.5
Citicorp, N.Y.	18.0
Trust Svcs of Amer., Calif.	18.0
First Interstate of Ariz.	17.9
Security Pacific (F), Calif.	17.8
Central Fidelity, Va.	17.7
First Trust Corp., Colo.	17.7
Beverly Bank, Ill.	17.6
CIGNA Corp., Conn.	17.6
John Hancock, Mass.	17.4
Republic National Dallas	17.4
First Interstate of Nevada	17.3
Key Trust Co., N.Y.	17.2
Colorado National Bank	17.2
Manufacturers Life, Ont.	17.1
American Security, D.C.	17.0
First Variable Life, Ark.	17.0
Morgan Guaranty, N.Y.	17.0
Pacific Mutual, Calif.	17.0
Trust Co. of Georgia	16.9
Natwest USA, N.Y.	16.9
Crocker Natl. (Fund R), Calif.	16.9
First of Omaha (Fund C), Neb.	16.9
First Kentucky Trust	16.8
First Wisconsin Natl., Madison	16.8
Fidelity Bank, Pa.	16.8
Mutual of New York	16.8
First Interstate of Calif.	16.8
First Alabama, Mobile	16.7
Lloyds Bank (Fund C), Calif.	16.6
Bank of California	16.6
AmSouth, Ala.	16.6
Shearson Lehman Index	**16.6**
Northern Trust, Ill.	16.6
Liberty National, Ky.	16.5
State Street Bank, Mass.	16.5
CIGNA Corp., Conn.	16.5
Aetna Life & Casualty (76), Conn.	16.5
Mutual of New York	16.5
First Jersey National	16.4
Continental Illinois	16.4
Mellon Bank, Pa.	16.4
Colonial American Natl., Va.	16.4
Hawaiian Trust	16.4
Sovran Bank, Va.	16.4
Hamilton Bank, Pa.	16.4
Chemical Bank (No. 1), N.Y.	16.3
Natl. Bank of Commerce, Neb.	16.3
California First Bank	16.3
Philadelphia National	16.3
Harris Trust, Ill.	16.2
Shawmut Bank, Mass.	16.2
Citizens & Southern, Ga.	16.2
First of Chicago	16.2
First City Dallas	16.2
Connecticut National Bank	16.2

5-year returns

	%
Centerre Trust, Mo.	22.0
United of Denver	22.0
Life of Virginia	21.3
First Interstate of Denver	21.2
First Kentucky Trust	19.9
Citicorp, N.Y.	19.7
Sovran Bank, Va.	19.7
American Security, D.C.	19.6
IAA Trust Co. (Fund B), Ill.	19.6
First of Toledo, Ohio	19.5
Connecticut National Bank	19.5
CIGNA Corp., Conn.	19.3
Society National, Ohio	19.2
Trust Svcs of Amer., Calif.	19.2
Pacific Mutual, Calif.	19.2
John Hancock, Mass.	19.1
Equitable Life (No. 5), N.Y.	19.1
Beverly Bank, Ill.	18.9
Lloyds Bank (Fund C), Calif.	18.8
First Interstate of Ariz.	18.8
Bankers Trust (Fund A), N.Y.	18.8
Mutual of New York	18.8
Mellon Bank, Pa.	18.7
Key Trust Co., N.Y.	18.7
CIGNA Corp., Conn.	18.7
Crocker Natl. (Fund R), Calif.	18.6
Bank of California	18.6
Central Fidelity, Va.	18.5
AmSouth, Ala.	18.5
First Wisconsin National	18.5
Fidelity Bank, Pa.	18.4
Travelers (Acct. P), Conn.	18.4
State Street Bank, Mass.	18.4
First Interstate of Calif.	18.4
Colorado National Bank	18.3
Marine Midland, N.Y.	18.3
Mutual of New York	18.3
First Jersey National	18.3
Wachovia Bank, N.C.	18.2
Hawaiian Trust	18.2
Morgan Guaranty, N.Y.	18.1
First of Omaha (Fund C), Neb.	18.1
First Variable Life, Ark.	18.1
Travelers (Acct. D), Conn.	18.1
Trust Co. of Georgia	18.0
Colonial American Natl., Va.	18.0
Natl. Bank of Commerce, Neb.	18.0
Seafirst Bank, Wash.	18.0
Shearson Lehman Index	**18.0**
Associated Manitowoc, Wis.	17.9
Liberty National, Ky.	17.9
Aetna Life & Casualty (76), Conn.	17.9
First of Chicago	17.9
Frost National, Texas	17.8
Hamilton Bank, Pa.	17.8
American National, Minn.	17.7
First Bank Milwaukee	17.7
Natwest USA, N.Y.	17.7
Allied Bank, Texas	17.7
First of Maryland	17.7
First Trust Corp, Colo.	17.7

10-year returns

	%
Life of Virginia	13.4
Bank IV Wichita, Kan.	13.3
Centerre Trust, Mo.	13.3
Sovran Bank, Va.	13.2
United of Denver	13.0
Fidelity Bank, Pa.	12.8
Pacific Mutual, Calif.	12.8
First Jersey Natl., N.J.	12.7
Beverly Bank, Ill.	12.6
Texas Commerce	12.6
Hibernia National, La.	12.5
American Security, D.C.	12.4
Seafirst Bank, Wash.	12.4
Manufacturers Hanover, N.Y.	12.2
First Interstate of Calif.	12.2

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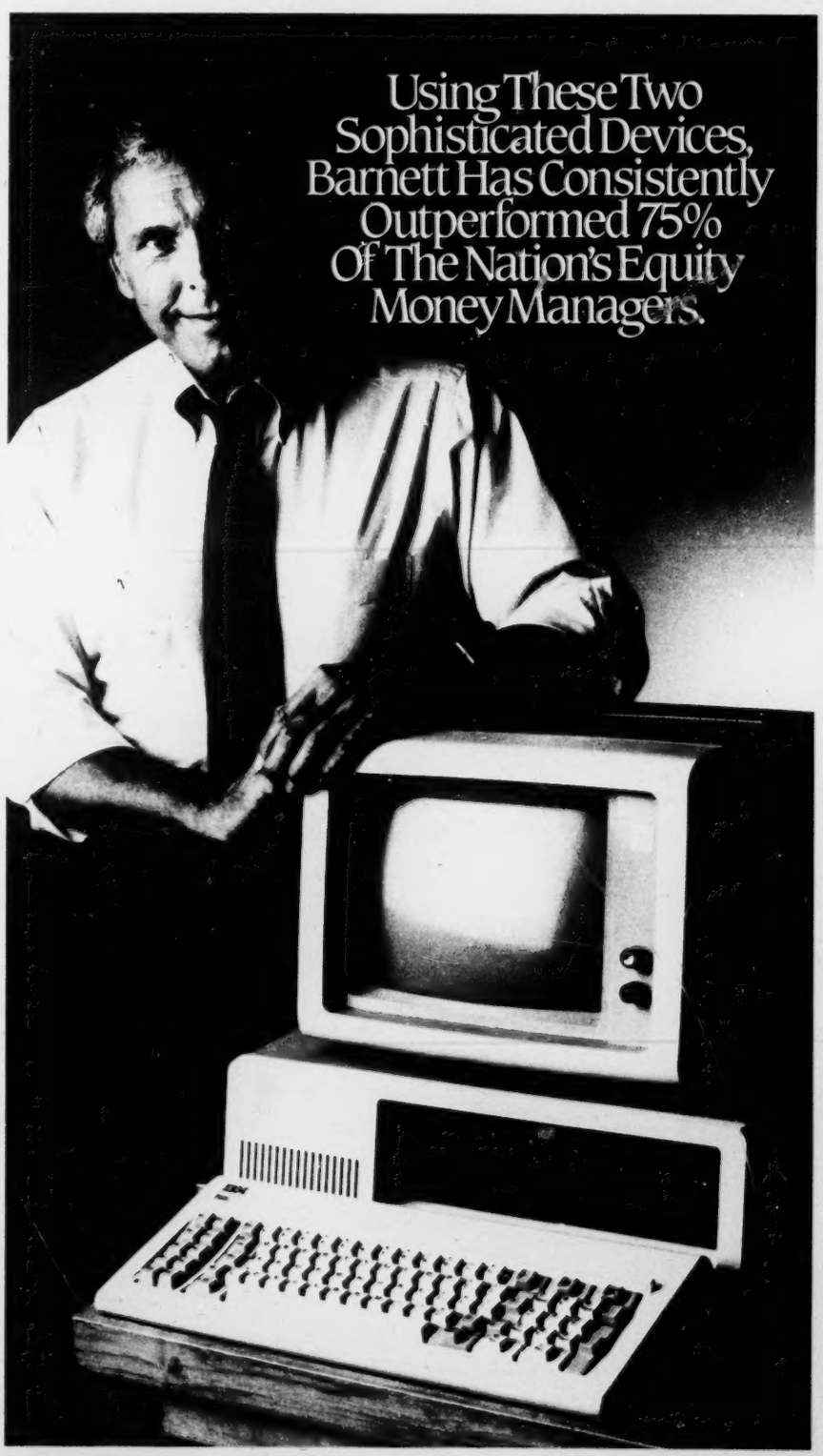

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Central Fidelity, Va.	12.1
First Interstate of Denver	12.0
First Kentucky Trust	11.9
Boatmen's National, Mo.	11.8
First Wisconsin National	11.8
First Interstate of Ariz.	11.8
CIGNA Corp., Conn.	11.8
Mercantile Trust, Mo.	11.7
Citicorp, N.Y.	11.6
American Natl. Bank, Tenn.	11.5
John Hancock, Mass.	11.5
Manufacturers Detroit	11.5
Commerce Union, Tenn.	11.5
Merchants National, Pa.	11.4
Lloyds Bank (Fund C), Calif.	11.3
Crocker Natl. (Fund R), Calif.	11.3
Bankers Trust (Fund B), N.Y.	11.3
Key Trust Co., N.Y.	11.3
Connecticut National Bank	11.3
Indiana National Bank	11.3
Cullen Bank, Texas	11.2
US Trust, N.Y.	11.2
Mellon Bank, Pa.	11.2
Allied Bank, Texas	11.2
Bessemer Trust, N.Y.	11.2
Oregon Bank	11.2
Bankers Trust (Fund A), N.Y.	11.2
First Bank Milwaukee	11.1
Jefferson Trust, Ill.	11.1
Toledo Trust, Ohio	11.1
First of Maryland	11.1
Shearson Lehman Index	**10.9**

Fixed . . .

Continued from page 19

"Mortgages hurt us for the quarter," he said, "even though we had lower coupon mortgages," which would tend to be repaid slower than higher coupon mortgages as interest rates fall. "Prices didn't go up," he added.

The maturity and duration for the portfolio during the quarter averaged, respectively, 15 years and 8½ years.

"We're starting to buy more corporate bonds," Mr. Franklin said. "They are looking attractive."

The Centerre fund has been a consistent, leading performer over the long term as well.

According to PIPER, it also ranked first in the year ended March 31, returning 50.1%. It was first again in the three-year rankings, returning 21.2%; first in the five-year rankings, returning 22%; and third in the 10-year rankings, returning 13.3%.

"With my record, you'd think every half-wit would have their money with me instead of these other funds," Mr. Franklin said.

Manufacturers Life Insurance Co., Toronto, ranked third in PIPER for the quarter, returning 14.4%.

Edward "Ted" Leman, investment vice president and portfolio manager for U.S. fixed income, said he played the 2013 strategy.

The entire fund of $1.5 million was in Treasuries maturing in 2013.

"I was bullish on interest rates," he said.

"The spread" — corporate to Treasuries — "widened," Mr. Lemon said. "So anyone investing at the quality end — Treasuries — got the biggest bang for the buck."

He said corporate issuers lambasted the market with refunding issues, driving corporate prices down.

New York-based Chase Manhattan Bank's fund ranked fourth in the quarter, returning 13.8%. Chase executives didn't return phone calls.

Union Labor Life Insurance Co., Washington, ranked fifth for the quarter, returning 13.4%.

Its $14 million fund was all in Treasury securities of maturities ranging from seven to 10 years, said Bob Wasilewski, senior portfolio manager.

"I liked the market," he said. "I think interest rates could trend down further. But the market might be volatile."

He doubts the fund will lengthen its maturities. "That's as aggressive as this fund will get," he said. "I don't feel comfortable going to long bonds."

He said falling oil prices triggered much of the good news for the fund. "I think oil prices have a bigger impact on the overall economy than people realize," he added.

The First Interstate Bank of Denver's $70 million fund ranked sixth for the quarter, returning 12.7%.

Jay Barr, the portfolio manager at Denver Investment Advisors Inc., the bank's unit that runs the fund, said its return benefited significantly from its Treasury bond holdings in the quarter.

"Governments outperformed corporates pretty significantly in the quarter," Mr. Barr said. The surge in corporate issues pushed prices down, widening the spread with Treasury securities and making government issues more

Continued on page 82

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Mutual Funds

ARP funds attracting corporate cash

By Barry B. Burr

Corporate cash managers, long used to investing their taxable cash internally through certificates of deposit, Eurodollar deposits and other generally safe instruments, are putting a small but growing piece of it into mutual funds.

Statistics aren't available on how much corporate cash has been attracted to mutual funds, already an investment haven for employee benefit money. The share of corporate taxable cash invested through mutual funds appears small, according to industry officials.

But the skyrocketing growth of adjustable rate preferred stock mutual funds "shows the growing awareness of corporate cash managers of mutual funds," said Charles O'Neil, senior vice president, Putnam Advisory Co., Boston.

Of all types of mutual funds, industry officials agree tax-qualified ones attract the most corporate cash, led by ARP funds and, to a lesser extent, money market mutual funds invested in municipal securities.

The reason for the attraction is their better after-tax yields and "stability of principal, which is paramount to a corporate treasurer," said Debra D. Spalding, group marketing direction, Fidelity Investments Institutional Services Co., a unit of Fidelity Mangement & Research Corp., Boston.

Corporate cash managers, of course, achieve the same results buying the securities directly. But some prefer to buy through mutual funds.

A cash manager for an East Coast pharmaceutical firm invests in a Fidelity tax-exempt money market fund, mainly for the convenience of adding or withdrawing funds quickly.

"It's not always easy to buy a tax-exempt bond for a short period of time," said the cash manager, who asked that her name not be used.

Lipper Analytical Services Inc., Westfield, N.J., lists 14 ARP mutual funds, with assets totaling more than $2.9 billion as of Dec. 31.

"It's unbelievable how the market has grown," said Polomba Weingarten, chief executive officer, Pilgrim Group Inc., Fort Lee, N.J., which started the first ARP fund in 1983, shortly after ARPS were first issued.

The Lipper ARP statistics belie the actual size of ARP-type funds that attract corporate cash. Lipper excludes the Dean Witter Tax-Advantaged Investment Trust from the ARP list, putting it under another category, even though most of its holdings are ARPS.

As of March 31, it had $296 million in assets and consisted of 66.6% ARPS, 32.1% flat-rate preferred stock and 1.3% cash, according to Charles Fiumefreddo, chairman of Dean Witter Reynolds Inc.'s New York-based money management division.

Peter M. Kunigk, institutional broker, Shearson Lehman Brothers Inc., New York, figures mutual funds hold about $4 billion of the $12 billion ARPS outstanding, through the ARP mutual funds and other high-yield strategy mutual funds.

"Mutual funds currently have a bigger share than ever of the ARP market," Mr. Kunigk said. "I don't see why they wouldn't get even bigger.

"I think there is a real incentive now for corporations to go into mutual funds than to buy ARPS individually themselves."

Mutual fund firms declined to break out the amounts invested by corporations. Tax-exempt money market funds, invested largely in municipal securities, attract high-tax bracket individual investors as well as tax shelter-seeking corporations, making it hard to estimate the share coming from cash managers.

But ARP funds, unlike other mutual funds, provide a fairly accurate indication of the amount invested by corporate cash managers, said Henry Shilling, Lipper's director of marketing.

Because of special tax advantages to corporations, which (unlike other investors) can exclude 85% of dividends received from their income, nearly all the money in ARP mutual funds probably comes from corporations, according to industry officials.

On a before-tax basis, ARP funds generally yield less than money market and other short-term mutual funds. But on an after-tax basis, the yields look more attractive to tax-paying cor-

Continued on page 51

Comparison of adjustable-rate preferred stock mutual funds

Fund	Net assets[1] $ mils.	For 12 months ended March 31 Total return[2]	Principal only	Yield[3]
W.P. Carey Corporate Preferred	42	9.77%	−1.09%	10.7%
Colonial Corp. Cash II	198	10.99	1.37	9.1
Dean Witter Tax Advantaged	278	13.36	4.30	8.2
Federated Corporate Cash	109	12.12	2.94	8.5
Fidelity Adjustable Rate	207	15.06	5.41	8.7
First Investors ARP	40	10.16	1.06	8.7
Flagship Corporate Cash Mgmt.	252	9.38	−0.08	9.2
Franklin Corporate Cash	79	10.14	0.75	9.0
Geico Adjustable Rate	76	11.22	1.95	8.7
Merrill Lynch Corporate Dividend	139	17.58	7.00	9.2
Pilgrim Adjustable Rate	880	11.19	1.76	8.8
Pru-Bache Adjustable Rate	248	14.42	4.27	9.2
Putnam Corporate Cash ARP	507	12.54	2.30	9.5
St. Clair Corporate Dividend	21	9.60	1.37	7.9
Vanguard Qualified Dividend III	138	8.76	0.17	8.3

[1] as of Dec. 31, 1985
[2] includes reinvestment of distributions
[3] includes non-dividend income; generally about 90% of yield qualifies for exclusion
Source: *Lipper Analytical Services Inc., Westfield, N.J.*

Value found in outside firms

By Trudy Ring

Having mutual funds managed by outside investment advisory firms is the exception rather than the norm, but mutual fund companies that do so are convinced of the practice's value.

"It provides an incentive to keep performance high," said Brian Mattes, assistant vice president of The Vanguard Group of Investment Cos., Valley Forge, Pa.

"Our performance record, I think, speaks for itself," said Elizabeth Watson, assistant treasurer and assistant to the chairman of The Ivy Fund, Hingham, Mass.

The reason Vanguard and Ivy officials believe performance pressure is stronger on outside managers is that it's easier to terminate or renegotiate a contract with an outside firm than with an in-house staff member.

The two firms differ on the merits of frequent management changes, however. Vanguard reviews its money manager contracts every year, but has made only a couple of changes in the past several years, Mr. Mattes said.

Changing managers frequently "is disruptive and not really in the best long-term interest of the funds, but it's available if we really need it," he said.

Ivy, on the other hand, has changed managers for its longest-standing fund five times in the past 10 years. Management changes aren't necessarily disruptive, Ms. Watson said.

Vanguard and Ivy's faith in their strategies doesn't mean staff-run funds can't perform well, too. There is value in both types of funds, said A. Michael Lipper, president of Lipper Analytical Services Inc., Westfield, N.J., which picks mutual fund investments for pension funds.

The firm has about $100 million under management, invested in a mix of staff-run and externally managed mutual funds, Mr. Lipper said. "We invest wherever we think there's the best value," he said.

Vanguard, Ivy and a relative newcomer, The Claremont Fund

Continued on page 50

Separate accounts used

Pension executives turning to mutual fund 'clones'

By Chuck Paustian

Pension fund executives are turning to separately managed replications of mutual funds rather than investing directly in the funds.

That's because they prefer the individual attention of a separately managed account while still capturing the investment strategy and performance of the mutual fund.

The extent to which the mutual fund is duplicated in the separate account depends on the nature of the fund and varies among management companies.

Some use the performance of the mutual funds to develop new separate account or enhance existing business.

A. Michael Lipper, president of Lipper Analytical Services Inc., Westfield, N.J., said the separate account route is appealing to both the investor and the mutual fund company.

"First of all, the company would show up in the proxy (of the mutual fund) and the company might not want to do that," said Mr. Lipper.

Mutual fund companies are required to disclose the names of investors that constitute more than 5% of the fund's assets.

Mr. Lipper also said large investors could prove to be a problem for the mutual fund company because they would eliminate any access to new money.

"We already have a number of funds that are closed to new money," he said. If a large pension plan represented a majority of a mutual fund's assets, when that investor pulled out, it could create liquidity problems for certain mutual funds, he added.

Most mutual fund companies offer separate account management based, at least in part, on the strategy that has made a particular mutual fund a success. Some mutual fund companies offer separately managed replications of more than one mutual fund.

Wynn Jessup, senior vice president and director of client services of Delaware Management Co., Philadelphia, said a division of the company, Delaware Investment Advisers, offers separate account management based on the strategy of the $1 billion Decatur Fund. Investment of all of the $10 billion managed by Delaware Investment follows the Decatur Fund's strategy.

Scott Gledhill, vice president of Pioneering Management Corp., Boston, said the firm offers separate account management based on three mutual funds — the $1.33 billion Pioneer Fund, the $2.69 billion Pioneer II Fund and the $27 million Pioneer Bond Fund.

The minimum account for separate management is $25 million. About $1.35 billion is managed in separate accounts emulating one of the mutual funds.

Other mutual fund companies that offer separate account management based on the strategy of a mutual fund include: The Putnam Management Co. Inc., Boston; T. Rowe Price Associates Inc., Baltimore; Paribas Asset Management, New York; and Investors Research Corp., Rolling Meadows, Ill.

The performance of the mutual fund companies has caught the attention of many pension fund executives.

W.E. Rose, director-retirement assets at Libbey-Owens-Ford Co., Toledo, Ohio, said his company has $34 million in a separately managed account with Delaware Investment Advisers, which follows the Decatur fund.

Libbey-Owens-Ford has about $580 million in retirement assets.

He said the decision to hire the firm was partially based on the similarity between the separate account management and the mutual funds.

"One of the things that attracted us to Delaware in the first place was their mutual fund success and philosophy," said Mr. Rose.

Mr. Rose said the company opted for separate account man-

Continued on page 55

Outside . . .

Continued from page 50

appropriate.

An advantage of multiple managers for each portfolio, he said, is that while the client's return will not be as good as that of the best-performing manager, it will not be as bad as that of the worst performer.

He also said the Claremont arrangement gives clients access to managers they could not use otherwise. The minimum investment in the mutual fund is $1,000, much less than the minimum separate account managed by most firms.

From June through December, Claremont's equity portfolio returned 10.3%; bond portfolio, 8.7%; and combined portfolio, 10.6%, he said. The money market fund's average yield last year was 7.5%.

Mr. Mattes and Ms. Watson disagreed on whether contracting with outside firms is more expensive than having in-house portfolio managers. Mr. Mattes said it may be cheaper. "We pay only for what we use," he said.

Ms. Watson said, "We perhaps pay a little more on a day-by-day basis for investment advice, but that's offset or more than offset by our performance."

At the Claremont Fund, the Claremont Co. and the outside managers divide what would be the average total fee, said Deborah Allen Olivier, Claremont Co. president.

The Fidelity-Chemical joint ventures are Metro Portfolio Investors Stock Fund, which has $4.3 million in assets, and Metro Portfolio New York Tax-Free Money Market Fund, with about $90 million. The funds' investors are mainly individuals, but they have attracted a small amount of pension dollars and corporate cash, said Stephen B. Timbers, chief investment officer of The Portfolio Group.

The stock fund returned 45.1% from its inception, March 31, 1985, to year end, Mr. Timbers said. The money market fund had a seven-day yield of 4.5% in early April.

The relationship between Fidelity and Chemical is limited, said Dick Reilly, vice president of Fidelity. Banks can't legally structure or underwrite mutual funds, but they can have joint ventures with mutual fund companies so they can make the funds available to their clients.

Including other money market funds, Fidelity has less than 1% of its $34 billion in mutual funds managed externally, Mr. Reilly said.

Mr. Reilly said he is a believer in in-house management for mutual funds. At Fidelity's operation, research done for one fund is shared with other funds, he said. While companies, such as Vanguard, that do use outside managers have some funds that perform well, mutual fund companies that use in-house managers also have good performance, Mr. Reilly said.

At The Boston Co., which has 60 mutual funds, using various management firms within the same parent company adds value and diversification for shareholders, said Stephen Jenks, vice president and director of institutional marketing for mutual funds. Of the firm's $22 billion in mutual funds, about $16 billion is institutionally held, he said.

The firm's equity mutual funds generally have a return about 10% better than the Standard & Poor's 500 stock index, Mr. Jenks said.

Other mutual fund companies that have some amount of their assets managed externally are The Dreyfus Corp., New York, 10.7%; Reich & Tang Inc., New York, 2%; Provident Institutional Management, Wilmington, Del., 1.9%; and Keystone Custodian Funds Inc., Boston, and AIM Management Inc., Houston, both less than 1%.

ARP funds . . .

Continued from page 49

porations, provided they hold the preferred securities at least 46 days to qualify for the exclusion.

Companies in the top 46% tax bracket, for instance, pay tax on only 15% of their dividend income, leaving 93.1% of the dividends received tax free.

By comparison, the same companies would receive only 54% of the interest income of a taxable money market fund.

Aside from yield, the attraction of ARP funds is stability of principal. "One of the main concerns of the corporate cash manager is principal preservation," said Mr. Shilling. "There are very few vehicles that protect them on the downside."

Colonial Life & Accident Insurance Co., Columbia, S.C., has $20 million, or 10%, of its $200 million in corporate cash in five mutual funds, said Roland David, investment officer. It has about $4 million in each, he said.

Three are ARP funds — the Flagship Corporate Cash Management Fund, Putnam Corporate Cash ARP Fund and Colonial Corporate Cash II Fund, which is no relation to the insurer. The other two also are dividend-oriented funds but all mix high-yield common and flat-rate preferred stocks, as well as ARPS — Fidelity Qualified Dividend Fund and Vanguard Qualified Dividend II Fund.

"Primarily the major reason we are in the funds is for the high yield," Mr. David said. "With 85% dividend exclusion, our net after-tax yield is high compared to what we could get in a money market fund. Another reason is the liquidity."

He said mutual funds have greater "manager expertise."

"We really don't have time to go through the selecting process to look at all the individual stocks," Mr. David added.

The before-tax returns, including dividends and appreciation, of the five funds in 1985 ranged from 8.2% to 11.5%, he said. After-tax returns weren't available. He said about 10% to 15% of the before-tax returns came from capital gains.

He noted only the dividends receive favorable tax treatment, while interest is fully taxable and capital gains are taxable at either the short- or long-term rate, depending on the period invested.

He said Colonial Life likes the funds to have at least 92% of their income, not including capital gains or losses, qualify for the dividend exclusion.

He said his company's mutual fund holdings probably will remain at about the same level this year.

The Pilgrim Adjustable Rate Fund has been the biggest ARP mutual fund since the start, with $880 million in assets as of Dec. 31. Its performance is described as "not overwhelming" but "average" by Mr. Kunigk.

Ms. Weingarten, in explaining Pilgrim's lead, said, "We are the purest form of ARP fund; we are the cleanest, simplest, easiest to understand ARP fund." The Pilgrim fund contains 7% flat-rate preferred stock; 8% cash equivalents; 85% ARPS, she said.

By comparison, Peter M Dodge, president of W.P. Carey & Co.'s Corporate Preferred Fund, noted his fund has a higher position in ARPS. He said it buys only ARPS, and no other kind of preferred stock, with about 95% in ARPS and the rest in cash-type instruments.

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CRITERION

Mutual funds . . .

Continued from page 1

Abbett & Co., New York, which had $3.8 billion in eight mutual funds at year end.

"The use of mutual funds by retirement plans is growing, there is no doubt," said A. Michael Lipper, president, Lipper Analytical Services Inc., Westfield, N.J. He estimates the most rapid growth is among defined contribution plans.

"No one has decent numbers on how much retirement plans have placed with mutual funds," Mr. Lipper said. "Counts are extremely questionable, including the ICI's."

The increasingly common corporate practice of terminating overfunded defined benefit plans is helping to fuel the growth. "When they replace (the terminated plan) with a defined contribution plan, the odds improve that they will use mutual funds," Mr. Lipper said.

"In the last two or three years, the mutual fund industry has been a very formidable competitor in the defined contribution marketplace," said E.F. Bowditch Jr., senior vice president-institutional marketing, at the Vanguard Group of Investment Cos. in Valley Forge, Pa.

Vanguard had about $18 billion in 41 mutual funds at the end of 1985. He estimated about $2.1 billion of the total came from defined contribution plans and $1.5 billion from defined benefit plans.

Mr. Bowditch also speculated pension executives might be more willing to use mutual funds in their defined benefit plans after growing comfortable with them in their defined contribution plans.

To successfully sell defined benefit plan executives on mutual funds, marketers will have to overcome many obstacles.

"Some corporate trustees have the view that mutual funds are not sophisticated investment vehicles," said Albert Mangeson, vice president-marketing of NEL Equity Services Corp., Boston.

The firm is a broker-dealer subsidiary of New England Life Mutual Life Insurance Co., which had about $1.7 billion in mutual fund assets at year end.

"Sponsors like to have someone hold their hands," said Randy Woods, vice president-marketing at Waddell & Reed Inc. in Kansas City, Mo. The firm, which had about $4.2 billion in 15 mutual funds at year end, is gearing up

Continued on page 54

Mutual fund families with assets of $1 billion or more

	Company	Total mutual fund assets $ millions	Mutual fund assets managed in-house $ millions
1.	Merrill Lynch Asset Mgmt., New York	51,877.3	51,877.3
2.	Fidelity Mgmt. & Research, Boston	33,996.1	33,738.7
3.	Federated Investors, Pittsburgh	31,087.8	31,087.8
4.	Dreyfus, New York	29,756.3	26,569.3
5.	Boston Co. Advisors, Boston	22,285.0	1,047.0
6.	Dean Witter Reynolds, New York	21,103.9	21,103.9
7.	Vanguard Group, Valley Forge, Pa.	17,984.9	6,021.6
8.	Kemper Financial Services, Chicago	17,909.3	17,909.3
9.	Franklin Advisers Inc., San Mateo, Calif.	16,042.2	16,042.2
10.	E.F. Hutton, New York	13,514.9	13,514.9
11.	Wellington Mgmt. Co., Boston	13,248.3	13,248.3
12.	Prudential-Bache Securities, New York	12,798.3	141.0
13.	Prudential Insurance Co., Newark, N.J.	12,657.3	12,657.3
14.	IDS/American Express Inc., Minneapolis	12,153.0	12,153.0
15.	Putnam Mgmt. Co., Boston	11,827.0	11,827.0
16.	Provident Institutional Mgmt., Wilmington, Del.	11,679.8	11,456.6
17.	Capital Research & Mgmt. Co., Los Angeles	11,208.7	11,208.7
18.	T. Rowe Price Associates, Baltimore	10,972.5	10,972.5
19.	Shearson/American Express, New York	10,906.0	10,906.0
20.	Goldman, Sachs & Co., New York	9,287.5	9,287.5
21.	PaineWebber, New York	8,824.9	8,824.9
22.	Mass. Financial Services Co., Boston	6,573.8	6,573.8
23.	AIM Mgmt., Houston	5,393.8	5,350.7
24.	Colonial Mgmt. Associates, Boston	5,344.7	5,344.7
25.	Scudder Stevens & Clark, New York	4,929.1	4,929.1
26.	SEI Financial Mgmt. Corp., Chicago	4,692.4	0.0
27.	Templeton Investment Counsel Ltd., Nassau, Bahamas	4,575.4	4,575.4
28.	Oppenheimer Asset Mgmt. Corp., New York	4,526.1	4,526.1
29.	Keystone Massachusetts Group, Boston	4,402.9	4,399.9
30.	Waddell & Reed Inc., Kansas City, Mo.	4,252.6	4,252.6
31.	Pioneering Mgmt. Corp., Boston	4,162.8	4,162.8
32.	Lord Abbett & Co., New York	3,822.6	3,822.6
33.	Alliance Capital Mgmt. Corp., New York	3,434.7	3,434.7
34.	Securities Fund Mgmt., Topeka, Kan.	3,221.9	0.0
35.	Delaware Mgmt. Co., Philadelphia	3,203.0	3,203.0
36.	J.& W. Seligman & Co., New York	2,986.2	2,986.2
37.	First Investors Mgmt. Co., New York	2,951.9	2,951.9
38.	Investors Research Corp., Santa Barbara, Calif.	2,863.9	2,863.9
39.	Oppenheimer Mgmt. Corp., New York	2,805.5	2,805.5
40.	Benham Capital Mgmt. Group, Palo Alto, Calif.	2,741.5	2,741.5
41.	Reich & Tang, New York	2,702.6	2,625.0
42.	Smith Barney, New York	2,641.0	2,641.0
43.	Criterion Funds Inc., Houston	2,593.2	2,593.2
44.	Webster Mgmt. Corp., New York	2,532.1	2,532.1
45.	Stein Roe & Farnham, Chicago	2,527.2	2,527.2
46.	Thomson McKinnon Asset Mgmt., New York	2,438.3	2,438.3
47.	Nuveen Advisory Corp., Chicago	2,413.4	2,413.4
48.	Drexel Burnham Mgmt. Corp., Philadelphia	2,261.7	2,261.7
49.	Reserve Mgmt. Corp., Boston	2,197.6	2,197.6
50.	John Hancock Advisers Inc., Boston	2,037.3	2,037.3
51.	American Portfolio Advisory Service, Lisle, Ill.	1,998.2	1,998.2
52.	Lazard Freres & Co., New York	1,867.7	1,867.7
53.	Security Pacific Nat'l Bank, Los Angeles	1,830.2	1,830.2
54.	Eaton Vance Corp., Boston	1,797.9	1,797.9
55.	National Securities & Research, New York	1,784.2	1,784.2
56.	New England Life/Loomis, Sayles, Boston	1,684.1	1,684.1
57.	USAA Investment Mgmt. Co., San Antonio, Texas	1,639.6	1,639.6
58.	Carnegie Capital Mgmt., Cleveland	1,577.3	1,577.3
59.	Value Line Inc., New York	1,530.9	1,530.9
60.	Heine Securities Corp., New York	1,510.1	1,510.1
61.	Neuberger & Berman Mgmt., New York	1,496.1	1,496.1
62.	Morgan Guaranty Trust, New York	1,286.3	1,286.3
63.	CIGNA Investment Mgmt., Hartford, Conn.	1,243.5	1,243.5
64.	Calvert Asset Mgmt., Washington	1,220.5	1,220.5
65.	Financial Programs, Englewood, Colo.	1,113.4	1,113.4
66.	Furman Selz Mager Dietz & Birney, New York	1,102.1	0.0
67.	Marine Midland Bank, New York	1,085.6	1,085.6
68.	Calvin Bullock Ltd., New York	1,071.1	861.9
69.	Dimensional Fund Advisors, Santa Monica, Calif.	1,065.8	1,065.8
70.	Nicholas & Co., Milwaukee	1,032.4	1,032.4
71.	American Capital Mgmt. Assets, Houston	1,028.1	1,028.1
72.	Pilgrim Mgmt., Ft. Lee, N.J.	1,001.6	1,001.6

Source: Lipper Analytical Services Inc., Westfield, N.J.

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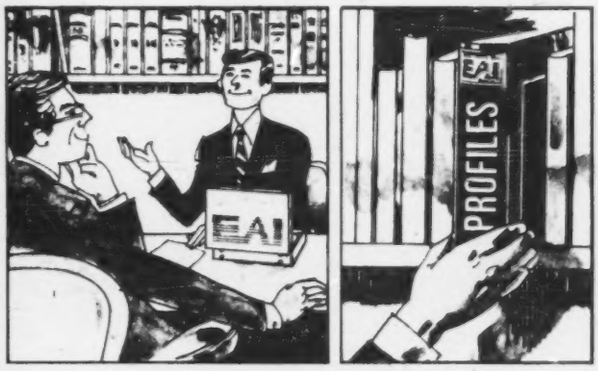

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Mutual funds . . .

Continued from page 52

or a marketing campaign aimed at employee benefit plans.

Pension fund executives "enjoy communicating with their advisers," noted Stanley Egener, president of the No-Load Mutual Fund Association, a trade association based in New York. "They like to meet with the adviser, hear him report his current thinking on the market and what posture he will take with the portfolio."

Mr. Egener also is president of Neuberger & Berman Inc., New York. The firm had about $1.5 billion in mutual funds at year end and about $2 billion currently. Of the $2 billion, about 90% is from defined contribution plans and 10% from defined benefit plans.

Mutual funds have been most successful among pension funds with less than $10 million in assets. That's because they might offer smaller plans greater diversification than they could get from one or two balanced managers.

"Mutual funds tend to have more securities than the portfolio of a boutique manager," Mr. Lipper said. He said they offer a higher degree of professional management than do most boutique managers servicing that market.

Mr. Lipper said mutual funds make sense for employee benefit funds as large as $100 million; Mr. Egener said funds up to $50 million would benefit from using mutual funds.

Terry Bilkey, first vice president at the Butcher Consulting Group, Pittsburgh, said his clients — mainly small and middle market pension funds — could use mutual funds, but still prefer individual managers.

Mutual funds provide "good diversification, reasonable fees, quality management, liquidity and the ability to change asset mix and managers easily," he said.

"I thought clients would receive that logic well, but I was wrong. They want the attention investment managers give to separate accounts.

"It takes a confident fund sponsor to use (mutual funds) because you don't get hand holding."

Another advantage is "you can be fairly certain (mutual fund managers) will stay in their investment discipline," said Laurence D. Lang, assistant treasurer at Campbell Soup Co., Camden, N.J., which uses seven equity mutual funds in its nine-manager equity portfolio. Campbell has more than $500 million in employee benefit assets.

Mr. Lang and others interviewed said using mutual funds eliminates the problem of suspect performance data supplied by boutique managers.

"For example, if you hire two new (boutique) managers and they perform poorly at the beginning, you have no way of telling if they are managing bad or if their style is out of favor," Mr. Lang said. "There is no meaningful measure of short-term performance, so all you have to go on is the performance data the managers have supplied you with and hope that the poor performance isn't due to bad management.

"Later, you may find that one was managed poorly and one was out of favor.

"With a mutual fund, all performance data is public knowledge."

Campbell's hired E.W. Axe & Co., Tarrytown, N.Y.; Capital Research Co., Los Angeles; Delaware Management Co., Philadelphia; Kemper Financial Services Inc., Chicago; Pioneering Management Corp., Boston; and J&W Seligman & Co., New York, as equity mutual fund managers, Mr. Lang said. He said he also uses a money market fund offered by the Putnam Management Co., Boston.

Campbell uses the investment strategy of its consultant — Lowry, Raclin, Harrell & Howerdd, Dallas — which is known for using mutual funds.

Control by fund executives and trustees over asset allocation is the most important ingredient of the discipline, which rules out the use of balanced managers, explained Mr. Lang.

The discipline also subscribes to the theory that over the long term, stocks will achieve the best returns. Lowry believes in allocating among four styles: aggressive growth; growth; growth and income; and income.

"If the asset allocation is 70% and you need to get to 60%, it is easier to sell mutual fund shares than individual stock," Mr. Lang said.

The Campbell equity holdings now comprise 50% of the fund's portfolio, down from 75%. "If the market continues going up, we may go down to 40%."

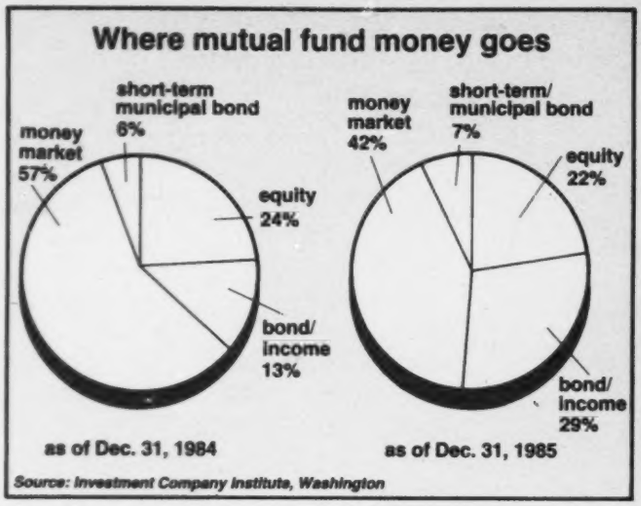
Campbell switched to mutual funds in 1981. "Prior to that, we had separate accounts at boutique managers," Mr. Lang said.

"We had meetings quarterly with managers and when performance was bad, they always had a good reason," he recalled.

"We would leave those meetings not feeling like we were managing anything. So we asked ourselves what we could do to look over the manager's shoulder better."

It was then the fund turned to Lowry.

Although Lowry has many clients — like Campbell — that subscribe to the firm's discipline, defined benefit plans most often use a single mutual fund as one of several money managers. For



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At Scudder, we're retirement plan specialists. Armed with advanced record-keeping systems, fast, accurate statements, and comprehensive management reports. We offer plain-English programs and guidance. We'll work with you from enrollment to retirement. Today, we help leading companies manage billions of dollars in retirement assets.

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Clones . . .

Continued from page 49

agement rather than the mutual fund approach to get individual attention paid to the pension account.

Gregory Nagle, manager of pensions at the Chicago Transit Authority Employees' Retirement System, with $730 million in assets, agreed individual attention is a factor, but said the performance of the mutual fund companies is paramount.

"The major thing we looked at, of course, was whether it looked like they could deliver the results of the mutual fund in a separate account," Mr. Nagle said.

He said the pension fund has a $69 million separate account with Delaware and a $34 million separate account with Putnam, which emulates the Putnam Investor fund.

The extent to which the performance of the mutual fund is replicated by the separate account varies. "It depends on the organization and really the type of securities and, to some degree, cash flow," said Mr. Lipper.

For example, Mr. Lipper said separately managed accounts tend to have cash inflows at one time, which could affect the average purchase price of securities and thus affect performance.

He said investors looking at separate account management have to decide what is an acceptable degree of tracking error. A one-for-one correlation is possible, but very difficult.

Mutual fund companies try to keep the investment process for the mutual funds and the separate accounts as close as possible.

Delaware's Mr. Jessup said the 11 separate account managers and the mutual fund manager meet once a week to discuss their investment decisions.

"They all operate under the exact same investment guidelines. They all have the same buy-sell disciplines," Mr. Jessup said.

He said the performance of the separate accounts and the mutual fund may differ slightly in any particular year because of different weightings of stocks, but the long-term results are virtually identical.

Stephen M. Barney, vice president-investments at Investors Research, said the separate account duplicates, on a percentage basis, the underlying mutual fund.

"Over time, the clones own exactly the same stocks in exactly the same proportions as the target fund," said Mr. Barney.

Some mutual fund companies use successful funds as a means of developing, or boosting, separate account business.

Paribas Asset Management, which began offering two mutual funds in April, will offer separately managed accounts on both of its mutual funds. The minimum account size for separate account management is $10 million.

"We think being a relatively new manager, (the mutual fund) gives us a public record and allows people to track us," said Wayne Leizear, executive vice president-marketing at Paribas.

Mr. Gledhill said Pioneering, which began offering mutual funds in 1928, started offering separate account management in 1976 to increase assets under management without changing the philosophy of the firm.

"At that point, they had two mutual funds, both equity and both invested in the same style and they did not want to invest in any other styles. They didn't want to invest in bonds at that time either," he said.

Growth of mutual funds

Year	No. of funds	$ mils.
1940	68	448
1965	170	35,200
1970	361	47,618
1975	426	45,875
1980	604	134,761
1981	665	241,365
1982	849	286,679
1983	1,072	292,986
1984	1,246	370,680
1985	1,505	495,500

Source: *Investment Company Institute, Washington*

Mutual fund investing . . .

Continued from page 54

tapped mutual funds as their entry into the international equity arena.

Generally, employee benefit clients invest differently from other mutual fund investors. They buy into equity mutual funds most heavily, industry participants say, while other mutual fund investors are putting their money into bond and income products.

Performance also is an issue.

The average compound annual return among the 512 general equity mutual funds and 160 special equity funds in the Lipper Analytical equity universe for the 10 years ended March 31 was 16.5%, vs. 14.3% for the Standard & Poor's 500 stock index. The 10-year average return for just the general equity funds was 16.65%.

For five years, Lipper's equity universe returned an average of 13.1% vs. 17.5% for the S&P 500 and 15.7% for Lipper's general equity mutual funds.

For one year, the average mutual fund in the Lipper equity universe returned 32.6%; the S&P 500, 37.7%; and the average fund in the general equity universe, 33.4%.

The average return of the 248 fixed-income funds in the Lipper universe for the 10-year period was 10.6% vs. 10.9% for the Shearson Lehman Government/Corporate bond index.

For the five-year period, the Lipper fixed-income universe had an average return of 16.7%, vs. 18% for the Shearson Lehman index.

For one year, the average return of the Lipper universe was 23%, vs. 28.9% for the Shearson Lehman. ■

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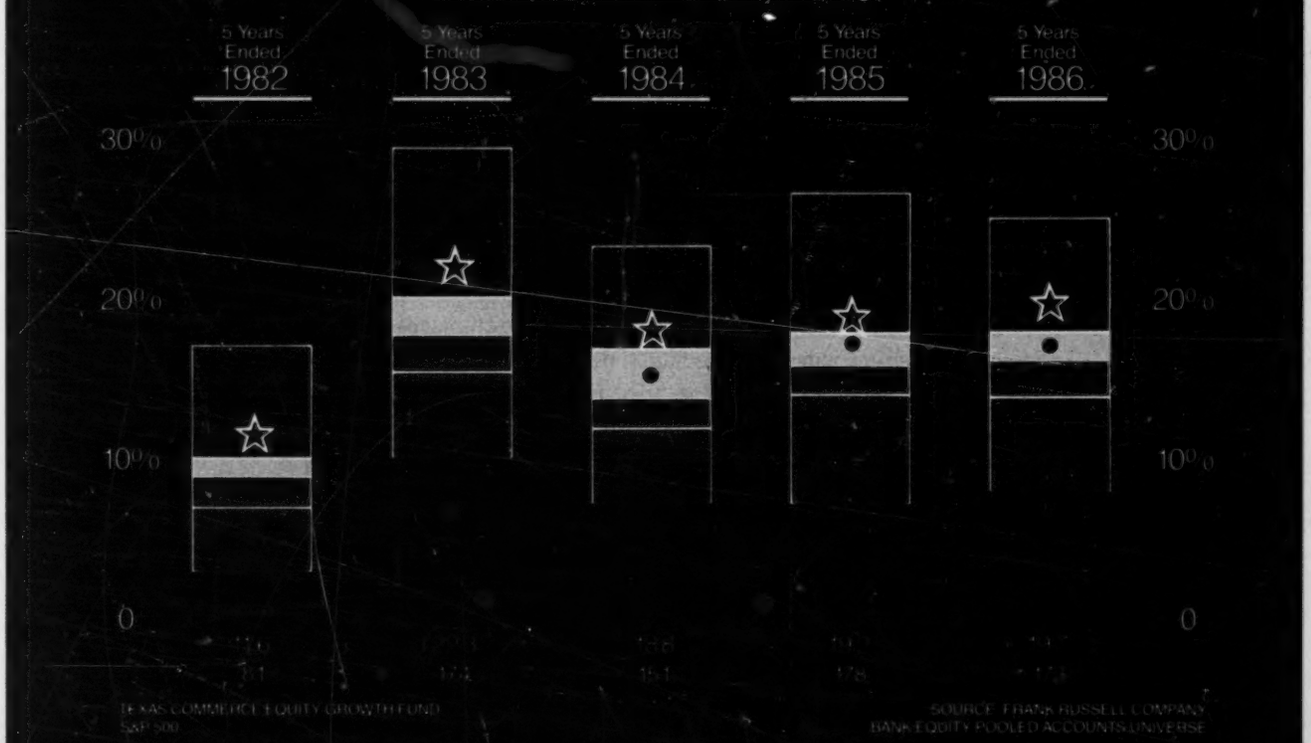

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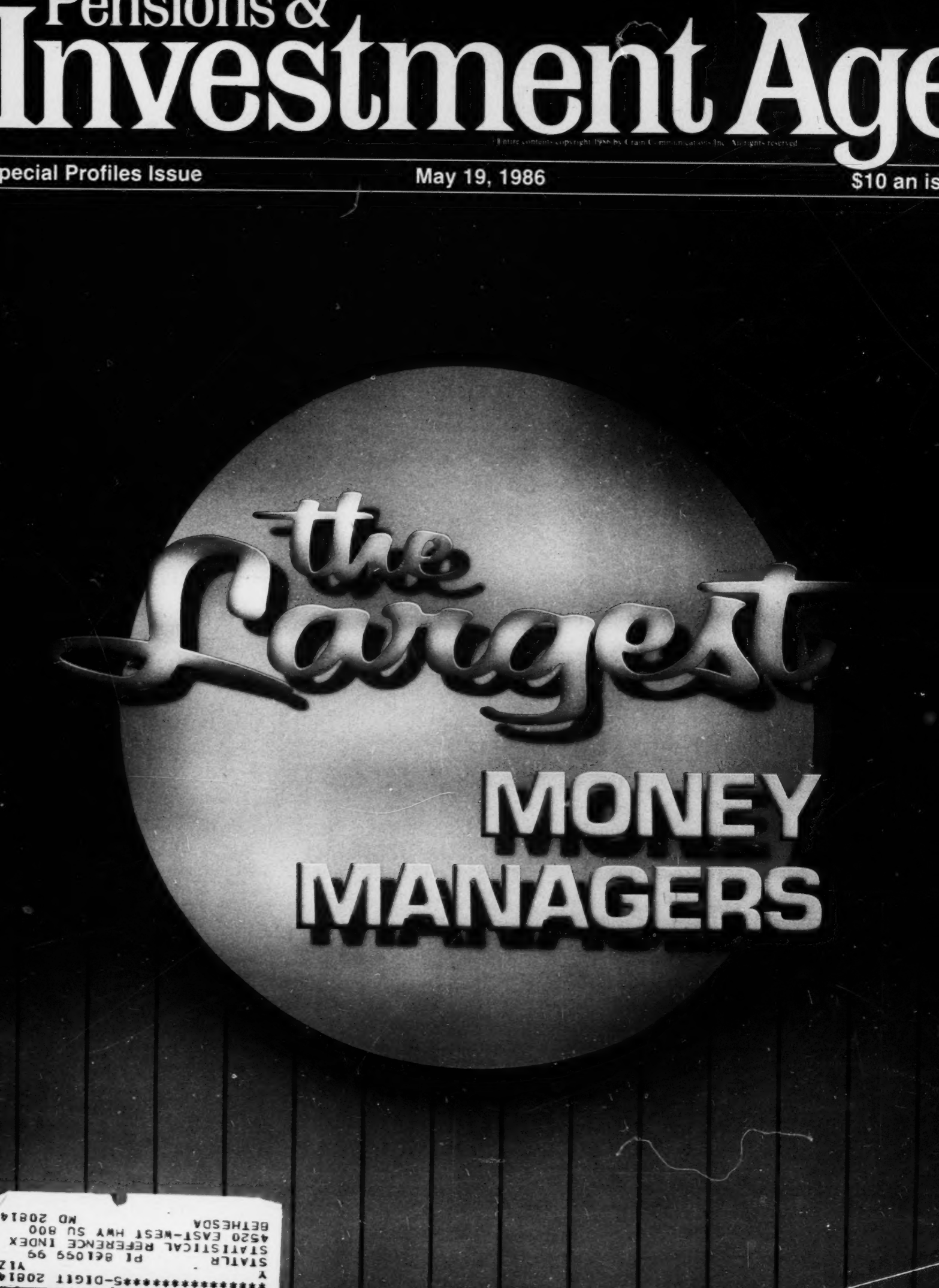

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Top 100 firms' assets surge 25%

By Carol Wiley

Fueled by the tremendous growth in the stock and bond markets, total assets managed by the nation's 100 largest money managers increased an impressive 25% during 1985, *Pensions & Investment Age*'s annual money manager survey shows.

The 100 largest money managers reported total assets under management of $1.5 trillion as of Jan. 1, 1986, compared with $1.2 trillion as of Jan. 1, 1985.

Total tax-exempt assets managed by the 100 largest managers were up 15%, to $843 billion from $735 billion a year earlier.

The Top 100 managers of tax-exempt assets in *P&I Age's* 13th annual survey were 36 banks and trust companies and subsidiaries, 28 insurance companies and subsidiaries and 36 independent investment counselors.

Statistics were compiled from questionnaires submitted by 846 U.S., Canadian and foreign managers of U.S. tax-exempt assets. *(Profiles begin on page 13.)*

Of the 846 managers, 187 are U.S. banks, trust companies and their subsidiaries; 69 are U.S. insurance companies and their subsidiaries; 550 are U.S. and international (excluding Canada) independent investment advisers; and 40 are Canadian banks, insurers and independent counselors.

The Top 25 investment managers reported $174 billion in tax-exempt assets under management at the beginning of 1986, up 21% from last year's $144 billion.

The largest independent investment managers of tax-exempt assets in this year's survey are Batterymarch Financial Management, with $12 billion; Scudder, Stevens & Clark, $11 billion; Delaware Investment Advisers, $9 billion; Criterion Investment Management Co., $8.7 billion; and Miller, Anderson & Sherrerd, $8.4 billion.

The 25 largest banks and trust companies reported more than $303 billion in total tax-exempt assets under management as of Jan. 1, an increase of 17% from the $259 billion recorded a year earlier.

The largest banks and trust companies ranked by tax-exempt assets are Bankers Trust — Investment Management Group, with $42 billion; J.P. Morgan Investment Management Inc., $39 billion; Wells Fargo Investment Advisors, $30 billion; Mellon Bank, $21 billion; and Manufacturers Hanover Investment Corp., $18 billion.

The 25 largest insurance companies and subsidiaries showed a 20% increase in tax-exempt assets under management during the year ended Jan. 1, to $350 billion from $291 billion. The largest insurance companies ranked according to tax-exempt assets are Prudential Asset Management Group, with $62 billion; Equitable Life Assurance Society of the United States, $54 billion; Metropolitan Life Insurance Co., $39 billion; Aetna Life and Casualty Co., $32 billion; and New England Mutual Life Insurance Co., $21 billion.

Market share among the Top 100 in the three major categories of investment managers — banks, insurers and independent counselors — shifted in favor of insurers and their subsidiaries during the year ended Jan. 1 *(see related story on page 2)*.

Insurance companies and their subsidiaries in the Top 100 grabbed 38% of the pie as of Jan. 1, compared with 34% a year earlier; banks, trust companies and their subsidiaries, 36% vs. 39% a year earlier; and independent counselors, 26% vs. 27% a year ago.

The average asset mix of the Top 200 money managers surveyed compared with the average of all managers surveyed shows smaller managers moved more heavily into equities last year than did the larger ones. That suggests the smaller institutional investor — not the conservative, big money manager — added fuel to the stock market rally.

According to the survey, the Top 200 money managers invested the same percentage — 49% of tax-exempt assets — in equities in 1985 as they did in 1984. But the average amount in equities for all managers was 55% as of Jan. 1, up from 52% a year earlier.

As of Jan. 1, the Top 200 investment managers reported an average tax-exempt asset mix of 49% stocks, 29% bonds, 9% cash, 7% equity real estate, 2% mortgages, 2% mortgage-backed securities and 2% other.

On Jan. 1, 1985, the Top 200 reported an average mix of 49% stocks, 30% bonds, 11% cash, 5%

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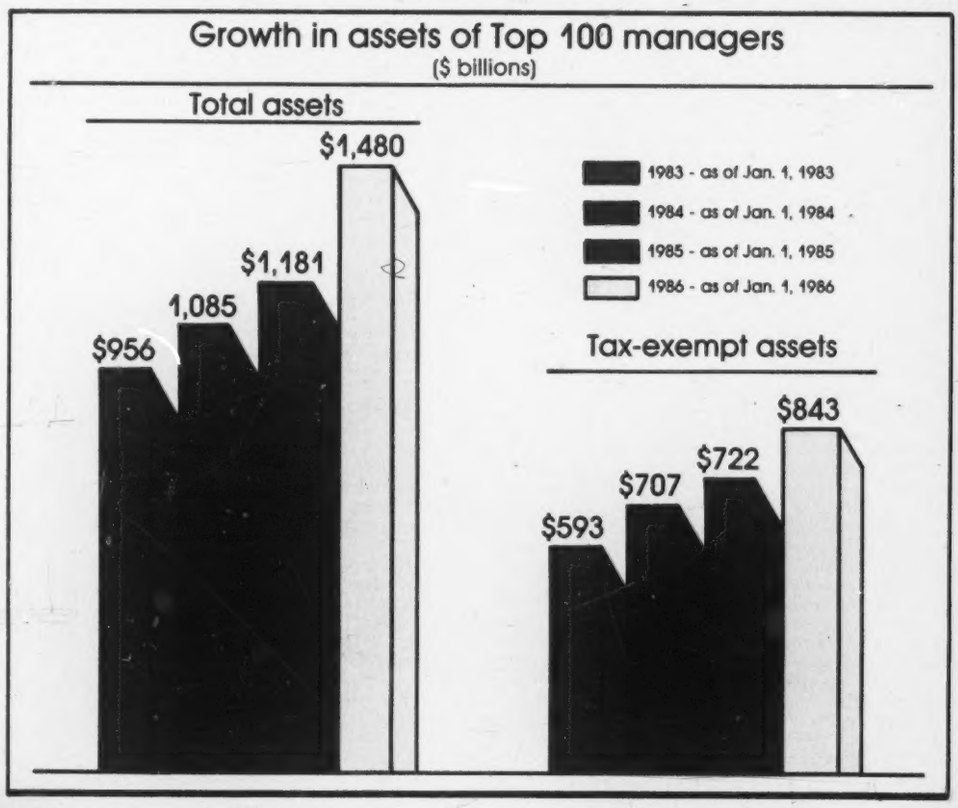

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Banks lag in pension business

Insurers win larger share

By Chuck Paustian

Insurance companies and their investment management subsidiaries captured the largest share of the tax-exempt assets managed by the 100 largest investment firms in 1985, a distinction held last year by banks, trust companies and their subsidiaries.

But banks acquired the biggest market share among the Top 200 managers and among all managers in *Pensions & Investment Age*'s 13th annual directory of money managers.

(Tax-exempt assets managed by Canadian investment management companies were excluded from market share calculations.)

Insurance companies and their subsidiaries controlled 38% of the $842.85 billion run by the 100 largest firms as of Jan. 1, up from 34% the previous year.

Banks, trust companies and their subsidiaries had a 36% share of the market among the 100 largest firms, down from 39% the previous year, while independent investment counselors had 26% of the market, down from 27%.

One reason for the gain in market share for insurers is the inclusion of assets managed by their investment management subsidiaries. *P&I Age* began including the assets of subsidiaries in the broader categories for banks and trust companies in 1984 and for insurance companies in 1985.

As a result, the assets of large money management firms owned by insurers — such as Alliance Capital Management, whose parent is Equitable Life Assurance Society of the United States, both of New York — this year have been counted in the insurance company category.

Changes in market share also can be attributed to consolidation of ownership in the investment management industry. Banks and insurance companies have been both acquiring previously independent investment counseling firms and establishing their own subsidiaries.

For example, Prudential Insurance Co. of America, Newark, N.J., purchased Jennison Associates Capital Corp., New York, in 1985. Jennison has $18 billion in tax-exempt assets under management.

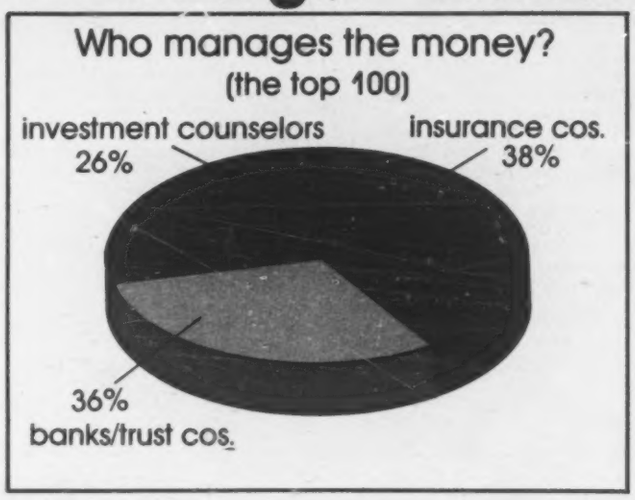
"While the institutions lost a lot of market share in the '70s, they're getting a lot of it back now through acquisitions," said Ronald D. Peyton, president of Callan Associates Inc., San Francisco.

Insurers have been most active in acquiring money management firms, he said.

The increase in the number of pension plan terminations also affects market share. Insurers gain assets under management because they sell annuities to pay benefits accrued in terminated plans; other managers lose assets because portfolios are liquidated and relationships ended as part of the termination.

Companies are expected to recover more than $6.15 billion through the completed and pending termination of 487 pension plans in 1985, up from the $3.66 billion expected to be recovered from 327 plans in 1984.

"With pension plan terminations, the people who get hurt the most is the independent investment counselors. The money goes from the investment counselors to the insurance companies," said David O'Donovan, vice president and head of manager search operations at SEI Funds Evaluation Services, Chicago.



Another factor affecting market shares in the investment management industry is the continuing popularity of certain investment choices.

"Indexing and international would not particularly favor the private counselors," said Ronald Jones, a partner at Hewitt Associates, Lincolnshire, Ill.

Even though interest rates have declined, Mr. Jones said guaranteed investment contracts — not offered by most independent counselors — are still popular investment vehicles for defined contribution plans.

While the insurance companies captured the largest share of the tax-exempt assets managed by the 100 largest firms, banks, trust companies and their subsidiaries controlled the largest portion of the assets of the Top 200 firms and of all firms.

Banks won 38% of the assets among the Top 200 managers, compared with 32% for insurers and 30% for independent firms.

When market share is tallied for all firms in *P&I Age's* directory, the bank category again came out on top, managing 37% of the $1.216 trillion in tax-exempt assets.

The independent firm category had a 33% share of the overall market, compared with 30% for the insurer category.

Among the 20 investment management firms with the largest dollar increases in tax-exempt assets under management, eight were banks, trust companies or their subsidiaries, and six each were in the insurance category and the independent counseling category.

The gains often were made by firms offering specialized investment products to which pension executives in aggregate committed substantial sums last year.

Tax-exempt assets managed by Leland O'Brien Rubinstein Associates Inc., Los Angeles, increased 247% during the year ended Jan. 1, to about $5.03 billion from $1.45 billion. The increase largely is due to the growing popularity of portfolio insurance, in which LOR specializes.

Another firm with a large increase — 109% — was Wells Fargo Investment Advisors, San Francisco. As of Jan. 1, Wells Fargo managed $29.52 billion in tax-exempt assets, up from $14.1 billion the previous year.

Again, the dramatic gain is the result of growing popularity of a particular investment approach, indexing in this case.

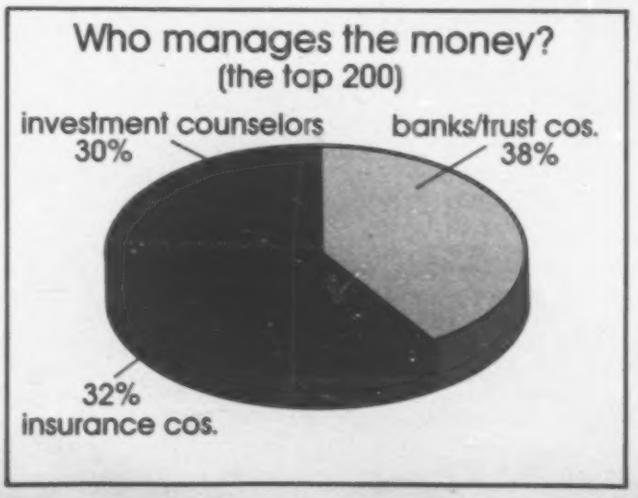
Other firms with significant dollar increases in tax-exempt assets under management include: Bankers Trust-Investment Management Group, New York, with $41.81 billion, up 31% from $31.91 billion; Equitable Real Estate Investment Management Inc., New York, with $14.12 billion, up 279% from $3.73 billion; Prudential Asset Management Group, Newark, N.J., with $43.97 billion, up 29% from $34.19 billion; and Metropolitan Life Insurance Co., New York, with $38.73 billion, up 27% from $30.55 billion.

Some firms showed declines in assets under management.

For example, the tax-exempt assets managed by Favia, Hill & Associates, New York, decreased 33% to $5.45 billion as of Jan. 1, down from $8.11 billion the previous year.

Erich G. Weissenberger, senior vice president and director of

Continued on page 113



Passive portfolios contain 26.8% of tax-exempt assets

By Ed Christman

Passive investment strategies now claim more than 25% of the institutional tax-exempt marketplace, according to *Pensions & Investment Age's* annual survey and directory of money managers.

The 806 managers in *P&I Age's* survey — a number that excludes Canadians — reported $325.5 billion, or 26.8%, of the $1.216 trillion in tax-exempt assets under management are in insurance company products such as annuities and guaranteed investment contracts, equity and fixed-income indexing and dedications and immunizations.

All statistics are as of Jan. 1.

Of the total, insurance companies claimed $210.3 billion; equity index managers, $67.5 billion; bond index managers, $12 billion; and managers running dedicated and immunized portfolios, $35.7 billion.

The $210.3 billion reported by insurance companies is 19.7% more than last year's figure of $175.7 billion.

Of the $210.3 billion, $81.2 billion was for GICs; $26.8 billion for annuity products (such as those used for funding the benefits of retirees); and $102.3 billion was for other general account products (including immediate participation guarantee contracts).

Of the GIC total, $35.6 billion was for bullet GICs and $45.6 billion was for window GICs.

The amount of money in GICs is 15% more than the $70.6 billion reported a year earlier.

Lower interest rates slowed bullet GIC sales during 1985, but the trend toward terminating defined benefit plans and replacing them with defined contribution plans spurred sales of window GICs and annuity products, insurance company officials said.

In defined contribution plans, investment choices usually are made by beneficiaries, who tend to be more "risk averse" than plan sponsors and more willing to accept lower interest rates, said William F. Towill, director of the employee benefits division at Aetna Life and Casualty Co.

Window GICs are used by defined contribution plans because they allow for deposits to be made in installments.

Aetna was the leader in bullet GICs, with $6.1 billion.

It finished second (with $24.3 billion) in general account products behind Metropolitan Life Insurance Co., New York, which had $36.2 billion in general account products. Third was Prudential Asset Management Group, Newark, N.J., with $23.1 billion, followed by Equitable Life Assurance Society of the United States, New York, $20.7 billion; and Travelers Corp., Hartford, Conn., $17.3 billion.

Metropolitan Life claimed the largest amount in GICs overall, $14 billion. The company could not break out its GIC assets by type.

Annuity products, such as terminal funding and closeouts, are purchased by fund sponsors when they terminate a pension plan and need to pay liabilities.

The slack from slow GIC sales is being taken up by closeouts and window GICs, said Mr. Towill.

He also said pension fund executives are becoming more sensitive to how well insurance companies manage the general account assets backing their products.

Insurance companies reported $102.3 billion for miscellaneous general account products, largely old money, such as IPGs.

In the indexing area, industry experts said index managers will continue to increase their market share — especially in equities — as long as active managers, on the whole, continue to underperform the market.

"The trend toward equity indexing has not subsided one bit in the last two years," said James Kartalia, director of marketing for the American National Bank & Trust Co. of Chicago, which had $7.2 billion in equity index fund as of Jan. 1.

Mr. Kartalia said American National Bank officials are discovering interest in index products with tilts from pension funds that already have money in ordinary Standard & Poor's 500 stock index funds.

In response, the bank began offering a mid-sized capitalization stock index product in October that has attracted about $500 million.

The medium-cap fund was begun because bank officials found 75% to 80% of the outstanding shares of the stocks that make up the S&P 500 are owned by institutional shareholders, while only about 35% of the outstanding shares of medium-sized issues are held by institutions.

In addition, almost 80% of the bank's new indexing clients during the first quarter of 1986 had never indexed before, Mr. Kartalia said.

The "well" for plain vanilla index funds "is not dry yet," he said.

The five leading equity index managers are Wells Fargo Investment Advisors, San Francisco, with $22.9 billion in equity index funds as of Jan. 1; Bankers Trust — Investment Management Group, New York, $18.2 billion; American National Bank; Mellon Capital Management Corp., San Francisco, $6.9 billion; and State Street Bank & Trust Co., Boston, $2.7 billion.

On the fixed-income side, "bond indexing is on a higher initial growth curve than equity indexing," said Frederick L.A. Grauer, president and chief investment officer of Wells Fargo, which reported $2.3 billion in bond index funds.

"It's possible (bond indexing) will become a bigger segment of institutional holdings than equity indexing represents," he said.

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Some firms graduate to managing billions; others are held back

By Marlene Givant

Many of the investment managers in *Pensions & Investment Age*'s first directory of money managers, published in 1974, should have been labeled "most likely to succeed." In the intervening 12 years, they have graduated from managing millions of dollars to billions.

Some firms were left back, though: A comparison of their 1974 and 1986 profiles shows little or no increase in tax-exempt assets under management.

Superachievers among 1974's smaller firms include Delaware Investment Advisers, Philadelphia, which increased its tax-exempt assets under management more than 345-fold, to more than $9 billion from a mere $26 million in 1974, and Pacific Investment Management Co., Newport Beach, Calif., whose assets escalated almost 243-fold, to $10 billion from $41 million.

Among the medium-sized firms 12 years ago, Oppenheimer Capital Corp., New York, increased its assets 40 times over, to $8 billion this year from $200 million in 1974, and Lehman Management Co., New York, reached $9.5 billion, about 30-fold jump from $310 million in 1974.

Big firms — by 1974 standards — are among the biggies today as well.

Wells Fargo Investment Advisors, San Francisco, leaped 60-fold to $30 billion from $500 million in 1974. Alliance Capital Management Corp., New York, jumped more than ninefold to $19 billion from less than $2 billion.

Several firms changed ownership in the intervening years. Capital Consultants Inc., Portland, Ore., formerly a subsidiary of Orbanco Inc., has been an independent asset management firm for at least 10 years since it bought itself out. Its assets rose 340% to $550 million this year from $125 million in 1974.

Capital Consultants Inc. formed Capital Trust Co., Portland, in 1982. Charles Swindells, who co-founded Capital Consultants Inc. in 1968 with firm President Jeff Grayson, has since left Capital Consultants, purchasing Capital Trust Co.

Lionel D. Edie & Co., New York, was bought by Manufacturers Hanover Investment Corp., New York, in 1980. Bayrock Advisors, New York, was bought by Prudential-Bache Securities Inc., New York, last year and now is called Prudential Bache Investment Management.

IDS Advisory Group, Minneapolis, which managed $130 million in tax-exempt assets in 1974 was acquired by American Express Co. in 1984 and now manages $3 billion, a more than 23-fold increase. The firm has launched two new divisions: IDS Growth Spectrum Advisors and IDS International Inc.

Alfred Harrison, president and chief investment officer of the advisory group in 1974 left the firm and joined Alliance Capital Management Corp., Minneapolis, in 1978 as director and senior vice president. Peter Anderson has been president and chief executive officer of IDS Advisory Group since 1982.

American National Bank & Trust Co. of Chicago had its most notable personnel changes about five years ago. Hal Arbit, who was second vice president of the firm in 1974, left in 1981 when he was head of the investment management group to form Treynor Arbit Associates in Chicago.

Edward Matz Jr., formerly senior vice president of marketing, joined Mr. Arbit a couple of months later as his senior vice president of marketing. In 1985, the firm moved to San Mateo, Calif., and its name was changed to Concord Capital Management.

Officials of some firms that didn't become as successful said they might have been too set in their approach or not aggressive enough in marketing efforts.

Clifford Associates Inc., Pasadena, Calif., had $5 million in tax-exempt assets in 1985 and only $4.6 million in 1974. The low level of growth, less than 8.7%, was due to the loss of major clients and minimal concentration in tax-exempt management, said A.M. Clifford II, chairman.

"Individuals are our primary push. We deal with institutions (mainly endowments and foundations) only when (individual) clients are directly involved with them. We must have lost a Texas hospital foundation (over the past 12 years), which would have made the difference right there. We picked up another foundation (this year) and now we're up by $5 million (to $10 million)," said Mr. Clifford.

Ashfield & Co. Inc., San Francisco, celebrates its 13th anniversary along with *P&I Age*'s directory. Tax-exempt assets totaled $54 million in the latest directory, up 28.5% from the $42 million during its first year in business.

"It took awhile to get going, as it always does," said Steve Lauck, principal since late 1983, adding growth has accelerated in the past three years.

Officials of David L. Babson & Co. Inc., Boston, and M. Pescatello & Co. Inc., New York, said they were hurt by competition from index fund managers.

Pescatello has not lost clients, but some have diverted money to index funds in the past three or four years, said Michael Pescatello, chief investment officer. Tax-exempt assets were $186 million in the latest directory vs. $225 million in the first.

"We peaked in the latter part of the '70s with about $280 million tax exempt," he said.

In 1980, Babson had tax-exempt assets of $2.5 billion vs. $672 million in the latest directory and $800 million in the first directory.

"There was a great surge to growth-stock portfolios (in the late 1970s)", said Peter C. Thompson, president. "We had built up a list of major national companies. A considerable number have gone in-house or to indexing."

E.W. Axe & Co. Inc., Tarrytown, N.Y., had tax-exempt assets of $146 million as of Jan. 1 vs. $110 million in 1974, a mere 32.7% increase. Tax-exempt assets reached $462 million in 1983 when John L. Shroeder returned as chairman, chief investment officer and chief executive officer. He had left his position as president and director of research in 1975 to be senior vice president and chairman of the investment committee at Bankers Trust Co., New York.

David O'Donovan, a vice president at SEI Funds Evaluation Services' Chicago office said that Mr. Shroeder's returning, and rehiring of some of his former managers "accounted for the up

Continued on page 114

Data for 1986 profiles, charts gathered from questionnaires

The information contained in the stories, profiles, charts and tables in this special issue was developed by *Pensions & Investment Age* from answers to detailed questionnaires.

Questionnaires were sent to client contacts at every bank, trust company, insurance company and investment counselor in the United States and Canada on *P&I Age*'s extensive directory mailing list. Real estate and international managers also were included, although *P&I Age* publishes separate directories on those subjects.

A team of more than a dozen editorial staff members in New York and Chicago worked on this issue — the 13th annual directory of investment advisers — for about four months before its publication. All quantifiable answers to the questionnaires were entered on a spreadsheet in an IBM PC-XT, from which the charts and tables were compiled.

All information was as of Jan. 1, 1986.

New features this year include a pie chart on market share for the 100 largest money managers (in addition to the annual one on the 200 largest managers); a listing of the 100 largest financial service companies and their subsidiaries; tables on the 25 managers with the most assets in passive investments, such as stock and bond index funds and dedicated and immunized bond portfolios; and tables of the 25 managers with the most assets in mortgages and mortgage-backed securities.

As in previous years, all managers were asked to provide total and tax-exempt assets under management; the tax-exempt asset mix; kinds, number and names of tax-exempt clients; areas of investment capabilities; and investment approaches to stocks, bonds and real estate, where appropriate.

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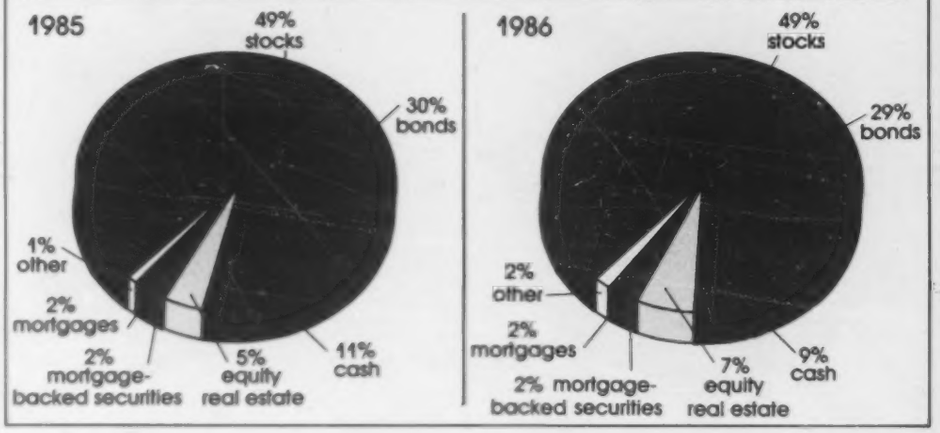
Top 200 money managers' average asset mix



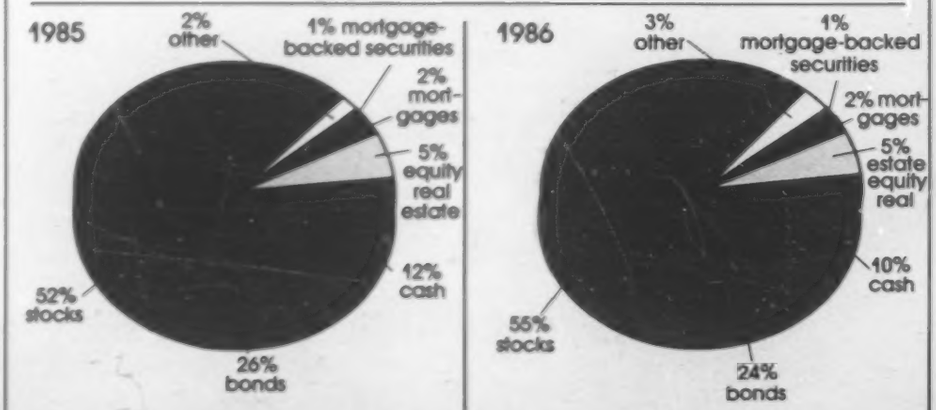
Tax-exempt asset mix (by adviser)

	Banks	Insurance companies	Investment counselors
Stocks	48%	46%	56%
Bonds	36	21	22
Cash	11	12	10
Equity real estate	1	9	5
Mortgages	1	6	2
Mtg.-backed securities	2	2	1
Other	1	4	4

Canadian asset mix

Canadian equities	33%
Bonds	38
Cash	11
Equity real estate	4
Mortgages	3
U.S. equities	10
Other	1

Overall asset mix



100 largest investment institutions* ($ mil.)

1. Prudential Investment	123,200	
2. Metropolitan Life Insurance	94,080	
3. Equitable Life Assurance	91,400	
4. Chase Manhattan	87,687	
5. Aetna Life and Casualty	83,484	
6. American Express	74,777	
7. Merrill Lynch & Co.	58,774	
8. Security Pacific	53,600	
9. Citicorp	49,700	
10. Wellington Mgmt./TDP&L	48,245	
11. Bankers Trust	46,860	
12. Travelers Insurance	45,254	
13. TIAA-CREF	45,000	
14. FMR	40,000	
15. J.P. Morgan & Co.	39,843	
16. CIGNA	39,000	
17. John Hancock Mutual Life	37,088	
18. Mellon Bank	34,240	
19. Wells Fargo & Co.	33,546	
20. Sears, Roebuck & Co.**	32,766	
21. Wachovia Bank	31,786	
22. Dreyfus Group	31,000	
23. New York Life Insurance	31,000	
24. Manufacturers Investment	31,000	
25. The State Farm Group	30,000	
26. New England Mutual Life	29,379	
27. California Public Employees'	29,166	
28. Scudder Stevens & Clark	28,530	
29. Kemper	28,355	
30. General Electric	26,400	
31. New York State Common Fund	25,997	
32. The Capital Group	24,309	
33. First Interstate Bancorp	23,000	
34. First Chicago	20,803	
35. Marsh & McLennan/Putnam	19,357	
36. T. Rowe Price Associates	18,600	
37. Northern Trust	18,000	
38. Hartford Life Insurance	17,742	
39. BankAmerica	17,227	
40. Franklin Resources	17,000	
41. Northwestern Mutual Life	16,784	
42. E.F. Hutton Group	16,000	
43. Massachusetts Mutual Life	15,579	
44. New York State Teachers	15,303	
45. American General	15,300	
46. Bankers Life	15,149	
47. Pacific Mutual Life	15,093	
48. Chemical New York	15,013	
49. Van Kampen, Merrit	14,706	
50. State Street Bank & Trust	14,454	
51. CNA Financial	14,169	
52. Wilmington Trust	14,000	
53. Lincoln National	13,550	
54. JMB Realty	13,400	
55. Harris Bankcorp.	12,900	
56. MONY	12,806	
57. PMC Financial	12,610	
58. N.J. Division of Investment	12,494	
59. Delaware Management	12,409	
60. Fidelcor	12,000	
61. Batterymarch Financial Mgmt.	11,905	
62. The Criterion Group	11,500	
63. Fiduciary Trust Co. of N.Y.	11,216	
64. Texas Teachers Retirement	11,188	
65. U.S. Trust Co., N.Y.	11,154	
66. Nationwide Mutual Insurance	11,115	
67. Bank of New England	10,900	
68. Continental Illinois	10,839	
69. Wisconsin Investment Board	10,800	
70. Stein Roe & Farnham	10,800	
71. Ohio Public Employees	10,760	
72. Michigan State Employees	10,516	
73. AmeriTrust	10,406	
74. First Bank Systems	10,400	
75. Mass. Financial Services	10,325	
76. PaineWebber/Mitchell Hutchins	10,301	
77. Ohio State Teachers	10,178	
78. Liberty Mutual Group	10,000	
79. Oppenheimer Holdings	10,000	
80. Washington Investment Board	9,900	
81. Brown Brothers Harriman	9,847	
82. Minnesota State Board of Invest.	9,800	
83. Neuberger & Berman	9,587	
84. Mutual Benefit Life	9,444	
85. Bank of New York	9,200	
86. Trust Co. of the West	9,110	
87. Fayez Sarofim	9,061	
88. Boatmen's Bancshares	9,000	
89. Endowment Mgmt. and Research	9,000	
90. Continental Corp.	8,838	
91. Fischer Francis Trees & Watts	8,800	
92. N.C. Retirement System	8,733	
93. Miller, Anderson & Sherrerd	8,400	
94. Connecticut Mutual Life	8,355	
95. NBD Bancorp.	8,190	
96. Rothschild	8,000	
97. INVESCO	8,000	
98. U.S. Steel & Carnegie	8,000	
99. Centerre Trust	7,984	
100. Transamerica	7,805	

Figures are as of Jan. 1 and include subsidiaries
***P&I Age estimate*

Top 100 advisers by total assets ($ mil.)

1. Metropolitan Life Insurance	76,494	
2. Merrill Lynch Asset Mgmt.	58,774	
3. Aetna Life and Casualty	51,885	
4. Travelers Companies	45,254	
5. Prudential Asset Mgmt.	43,968	
6. Bankers Trust	41,810	
7. J.P. Morgan Investment	39,843	
8. CIGNA	39,000	
9. John Hancock Financial	37,088	
10. Fidelity Investments	36,662	
11. Wells Fargo Investment	29,520	
12. Scudder, Stevens & Clark	28,530	
13. Kemper Financial Services	28,170	
14. New York Life Insurance	25,749	
15. Citicorp Investment Mgmt.	23,917	
16. Alliance Capital Mgmt.	23,271	
17. Equitable Real Estate	22,746	
18. Wellington/Thorndike, Doran	22,584	
19. Mellon Bank	22,455	
20. Equitable Capital Mgmt.	20,800	
21. Manufacturers Hanover	20,084	
22. T. Rowe Price Associates	18,200	
23. Chase Investors Mgmt.	18,100	
24. Jennison Associates	18,000	
25. Northern Trust	18,000	
26. Northwestern Mutual Life	16,784	
27. Loomis, Sayles & Co.	16,184	
28. Massachusetts Mutual Life	15,579	
29. Bankers Life	14,926	
30. Lehman Mgmt.	14,570	
31. State Street Bank & Trust	14,454	
32. Wilmington Trust	14,000	
33. Lincoln National Life	13,550	
34. JMB Institutional Realty	13,400	
35. Capital Guardian Trust	12,955	
36. Harris Trust and Savings	12,900	
37. MONY Financial Services	12,806	
38. BA Investment Mgmt.	12,527	
39. Batterymarch Financial Mgmt.	11,905	
40. New England Mutual Life	11,764	
41. Criterion Investment Mgmt.	11,500	
42. Capital Research and Mgmt.	11,354	
43. Fiduciary Trust Co., N.Y.	11,216	
44. Nationwide Insurance	11,115	
45. United States Trust Co., N.Y.	11,100	
46. Stein Roe & Farnham	10,800	
47. AmeriTrust	10,406	
48. Massachusetts Financial	10,324	
49. Mitchell Hutchins Asset Mgmt.	10,304	
50. Pacific Investment Mgmt.	10,044	
51. Brown Brothers Harriman	9,847	
52. Neuberger & Berman	9,587	
53. Boston Co.	9,520	
54. Delaware Investment	9,196	
55. Trust Company of the West	9,110	
56. American Nat'l Bank & Trust	9,105	
57. Fayez Sarofim & Co.	9,061	
58. Mellon Capital Mgmt.	8,925	
59. Fischer, Francis, Trees & Watts	8,800	
60. First Trust Co.	8,500	
61. Miller Anderson & Sherrerd	8,400	
62. Connecticut Mutual Life	8,355	
63. Oppenheimer Capital	8,211	
64. National Bank of Detroit	8,190	
65. INVESCO Capital Mgmt.	8,000	
66. Transamerica Investment	7,805	
67. Texas Commerce Bank	7,600	
68. RepublicBank, Dallas	7,534	
69. Equitable Investment Mgmt.	7,520	
70. Sanford C. Bernstein & Co.	7,300	
71. First Chicago Investment	7,160	
72. Lord Abbett & Co.	7,115	
73. First Pennsylvania Bank	7,100	
74. Putnam Advisory	7,037	
75. Irving Trust	7,000	
76. Manufacturers Nat'l, Detroit	7,000	
77. Morgan Stanley Asset Mgmt.	6,983	
78. Templeton International	6,966	
79. Rosenberg Capital Mgmt.	6,930	
80. InterFirst Investment Mgmt.	6,400	
81. Centerre Trust Co. of St. Louis	6,338	
82. Boatmen's National Bank	6,197	
83. Vanguard Group	6,150	
84. NCNB National Bank	6,081	
85. Prudential Bache Investment	6,000	
86. Connecticut National Bank	5,962	
87. National City Bank of Cleveland	5,900	
88. Pioneering Mgmt.	5,700	
89. American Fletcher National	5,617	
90. Standish, Ayer & Wood	5,541	
91. Favia Hill & Associates	5,454	
92. Continental Assurance	5,436	
93. J&W Seligman & Co.	5,400	
94. Smith Breeden Associates	5,400	
95. Mutual Benefit Life	5,398	
96. Comerica Bank-Detroit	5,347	
97. Copley Real Estate Advisors	5,300	
98. BEA Associates	5,230	
99. Union Mutual Life	5,230	
100. CoreStates Investment Advisers	5,145	
TOTAL	**1,480,454**	

Managers ranked by tax-exempt assets

Manager	As of Jan. 1 ($ millions)
1. Prudential Asset Mgmt.	43,968
2. Bankers Trust-Investment	41,810
3. J.P. Morgan Investment	38,866
4. Metropolitan Life	38,728
5. Aetna Life and Casualty	31,861
6. Wells Fargo Investment	29,520
7. Travelers Companies	20,557
8. Alliance Capital Mgmt.	18,895
9. Manufacturers Hanover	18,383
10. CIGNA	18,000
11. Jennison Associates Capital	18,000
12. Citicorp Investment Mgmt.	17,938
13. John Hancock Financial	15,100
14. Chase Investors Mgmt.	15,000
15. Equitable Capital Mgmt.	14,576
16. Equitable Real Estate	14,117
17. Loomis, Sayles & Co.	12,994
18. Capital Guardian Trust	12,883
19. State Street Bank & Trust	12,252
20. Mellon Bank	12,238
21. Batterymarch Financial Mgmt.	11,504
22. Bankers Life	10,753
23. Scudder, Stevens & Clark	10,677
24. Wilmington Trust	10,000
25. Pacific Investment Mgmt.	9,999
26. Lehman Mgmt.	9,459
27. New York Life	9,118
28. Delaware Investment Advisers	9,094
29. Mellon Capital Mgmt.	8,925
30. Trust Company of the West	8,903
31. Fiduciary Trust Co. of N.Y.	8,823
32. Criterion Investment Mgmt.	8,700
33. Harris Trust and Savings Bank	8,400
34. Miller Anderson & Sherrerd	8,400
35. Fayez Sarofim & Co.	8,275
36. Wellington/Thorndike, Doran	8,257
37. American Nat'l Bank & Trust	8,160
38. INVESCO Capital Mgmt.	7,900
39. Oppenheimer Capital	7,790
40. Northern Trust	7,571
41. Fischer, Francis, Trees	7,500
42. T. Rowe Price Associates	7,375
43. First Chicago Investment	7,160
44. Equitable Investment Mgmt.	6,813
45. Massachusetts Mutual Life	6,600
46. Rosenberg Capital Mgmt.	6,400
47. Boston Co.	6,156
48. Morgan Stanley Asset Mgmt.	6,031
49. Sanford C. Bernstein & Co.	6,000
50. Brown Brothers Harriman	5,881
51. Nat'l Bank of Detroit	5,703
52. Putnam Advisory	5,697
53. Favia Hill & Associates	5,454
54. AmeriTrust	5,404
55. Mutual Benefit Life	5,398
56. RepublicBank, Dallas	5,337
57. Neuberger & Berman	5,073
58. Leland O'Brien Rubinstein	5,029
59. BEA Associates	4,980
60. Lincoln Capital Mgmt.	4,869
61. Capital Supervisors	4,828
62. MONY Financial Services	4,803
63. New England Mutual Life	4,695
64. Lincoln National Life	4,614
65. Stein Roe & Farnham	4,600
66. Boatmen's Nat'l Bank	4,500
67. Lazard Freres Asset Mgmt.	4,465
68. Security Pacific Investment	4,345
69. BA Investment Mgmt.	4,342
70. National Investment Services	4,000
71. Vanguard Group	3,892
72. American Fletcher Nat'l Bank	3,740
73. Forstmann-Leff Associates	3,700
74. Investment Advisers	3,700
75. Centerre Trust Co. of St. Louis	3,657
76. ASB Capital Mgmt.	3,651
77. Copley Real Estate Advisors	3,500
78. Irving Trust	3,400
79. Kemper Financial Services	3,374
80. Transamerica Investment	3,354
81. Columbia Mgmt.	3,332
82. Fidelity Mgmt. Trust	3,253
83. Union Mutual Life	3,209
84. PM Capital Advisors	3,193
85. Lord Abbett & Co.	3,147
86. Nationwide Insurance	3,110
87. Barrow, Hanley, Mewhinney	3,109
88. MacKay-Shields Financial	3,107
89. Dodge & Cox	3,001
90. McMorgan & Co.	3,000
91. Kennedy Associates	2,988
92. Wachovia Bank & Trust	2,971
93. United Capital Mgmt.	2,928
94. Pittsburgh Nat'l Bank	2,927
95. Dewey Square Investors	2,900
96. Continental Assurance	2,896
97. Gardner and Preston Moss	2,885
98. IDS Equity/Fixed-Income	2,835
99. Mercantile Trust	2,800
100. Nat'l City Bank, Cleveland	2,800
101. The RREEF Funds	2,800
102. NCNB Nat'l Bank	2,701
103. First Trust	2,700
104. Texas Commerce Bank	2,686
105. Provident National	2,677
106. Massachusetts Financial	2,671
107. The Griffin Group	2,652
108. Atalanta/Sosnoff Capital	2,638
109. Trusco Capital Mgmt.	2,608
110. Glenmede Trust	2,600
111. Weiss, Peck & Greer	2,600
112. Hibernia Nat'l Bank	2,593
113. Provident Capital Mgmt.	2,587
114. Mutual of America Life	2,585
115. CMB Investment Counselors	2,570
116. Trinity Investment Mgmt.	2,524
117. Discount Corp. of New York	2,510
118. Northwestern National Life	2,506
119. First Pennsylvania Bank	2,500
120. Torray Clark & Co.	2,500
121. Merrill Lynch Asset Mgmt.	2,450
122. Duff & Phelps Investment	2,443
123. Fred Alger Mgmt.	2,413
124. Corporate Property Investors	2,400
125. Standish, Ayer & Wood	2,386
126. Indiana Investment Advisors	2,374
127. Constitution Capital Mgmt.	2,367
128. Dimensional Fund Advisors	2,347
129. Wright Investors' Service	2,301
130. Shields Asset Mgmt.	2,300
131. InterFirst Investment Mgmt.	2,298
132. Wentworth Hauser & Violich	2,260
133. Connecticut Nat'l Bank	2,230
134. Western Asset Mgmt.	2,214
135. Bank of New York	2,200
136. Fidelity Investments	2,200
137. Frank Russell Trust	2,166
138. Capital Research and Mgmt.	2,150
139. Bernstein-Macaulay	2,140
140. Heitman Advisory	2,100
141. AmSouth Bank (Trust Division)	2,098
142. First Interstate of California	2,090
143. Morgan Grenfell Investment	2,075
144. Wilshire Associates	2,050
145. Northwest Capital Mgmt.	2,039
146. Dreyfus Mgmt.	1,986
147. M.D. Sass Investors Services	1,949
148. United Missouri Investment	1,931
149. Todd Investment Advisors	1,922
150. Pioneering Mgmt.	1,900
151. Templeton International	1,857
152. Capitoline Investment Services	1,810
153. Continental Illinois	1,807
154. First Fidelity Bank New Jersey	1,800
155. Thompson, Siegel & Walmsley	1,800
156. United States Trust Co. of N.Y.	1,800
157. Connecticut Mutual Life	1,799
158. State Mutual Life	1,775
159. Mercantile-Safe Deposit	1,773
160. Wertheim Asset Mgmt.	1,748
161. First Union/Capital Mgmt.	1,738
162. First Interstate Bank of Denver	1,722
163. Cooke & Bieler	1,702
164. Fidelity International	1,688
165. Denver Investment Advisors	1,680
166. Hartford Life	1,666
167. Brundage, Story and Rose	1,664
168. C&S Investment Advisors	1,650
169. First Wisconsin Trust	1,645
170. Vaughan, Nelson	1,620
171. Amalgamated Bank of N.Y.	1,600
172. Crocker Investment Mgmt.	1,600
173. Midlantic Nat'l Bank	1,600
174. First Asset Mgmt.	1,581
175. F.I.A. Associates	1,565
176. Endowment Mgmt. & Research	1,554
177. Richard Ellis	1,510
178. Aldrich, Eastman & Waltch	1,500
179. Comerica Bank-Detroit	1,500
180. Hotchkis & Wiley	1,500
181. JMB Institutional Realty	1,500
182. LaSalle Advisors	1,500
183. STW Fixed Income Mgmt.	1,465
184. Society Nat'l Bank	1,450
185. Touche Remnant Pension	1,446
186. Sit Investment Associates	1,420
187. Franklin Portfolio Associates	1,417
188. General American Investors	1,417
189. Value Investors	1,404
190. First Nat'l Bank of Atlanta	1,402
191. Robert C. Brown & Co.	1,396
192. Rowe Price-Fleming Int'l	1,382
193. Fifth Third Bank	1,372
194. Fidelity Bank	1,363
195. Provident Investment Counsel	1,355
196. Shearson Asset Mgmt.	1,354
197. First Pacific Advisors	1,325
198. Shawmut Banks	1,325
199. Eaton Vance Mgmt.	1,317
200. John W. Bristol & Co.	1,300
201. Eastdil Realty	1,300
202. First Manhattan Capital Mgmt.	1,300
203. L&B Real Estate Advisors	1,300
204. Manning & Napier Advisors	1,300
205. J&W Seligman & Co.	1,300
206. Strong/Corneliuson Capital	1,297
207. First Investment Mgmt.	1,290
208. Value Line Asset Mgmt.	1,263
209. Manufacturers Nat'l of Detroit	1,258
210. Concord Capital Mgmt.	1,255
211. Warburg, Pincus Counsellors	1,244
212. Solomon Asset Mgmt.	1,237
213. Newbold's Asset Mgmt.	1,232
214. General American Life	1,222
215. Phoenix Mutual Life	1,215
216. Northwestern Mutual Life	1,211
217. Grantham, Mayo, Van Otterloo	1,205
218. Crown Life-U.S. Pensions	1,204
219. Public Storage	1,200
220. Hutton Capital Mgmt.	1,189
221. Smoot, Miller, Cheney & Co.	1,180
222. Rothschild International	1,175
223. Investment Counselors of Md.	1,166
224. Hellman, Jordan Mgmt.	1,153
225. McGlinn Capital Mgmt.	1,142
226. Siebel Capital Mgmt.	1,135
227. Cole, Yeager & Wood	1,130
228. McCowan Associates	1,125
229. Hagler, Mastrovita, & Hewitt	1,100
230. Merchants Nat'l Bank & Trust	1,089
231. Drexel Burnham Lambert	1,085
232. David J. Greene and Co.	1,082
233. Union Labor Life	1,080
234. J.H. Ayers & Co.	1,072
235. Dillon, Read Capital	1,046
236. Balch, Hardy & Scheinman	1,044
237. CoreStates Investment	1,040
238. Bear Stearns Asset Mgmt.	1,002
239. Luther King Capital Mgmt.	1,000
240. Cashman, Farrell & Associates	996
241. United of Omaha Life	989
242. Sovran Capital Mgmt.	987
243. Marinvest	976
244. First Tennessee Investment	974
245. Old Kent Bank & Trust	966
246. Rainier Nat'l Bank	963
247. Analytic Investment Mgmt.	956
248. Mgmt. Asset	953
249. HT Investors	950
250. Reich & Tang	948
251. Investment and Capital Mgmt.	941
252. Penn Mutual Life	937
253. Schroder Real Estate Associates	932
254. Schafer Capital Mgmt.	925
255. Boatmen's First Nat'l, K.C.	920
256. Liberty Nat'l Bank & Trust	894
257. Institutional Capital	893
258. Karsten Institutional Realty	883
259. Wall, Patterson, Hamilton	879
260. Pacific Financial Research	862
261. Harbor Capital Mgmt.	859
262. Waddell & Reed Asset Mgmt.	859
263. Pilgrim, Baxter, Hoyt & Greig	855
264. Chicago Title & Trust	850
265. Geewax, Terker & Co.	850
266. Nat'l Bank of Washington	837
267. Union Central Life	828
268. First Interstate Bank of Oregon	823
269. First Commercial Bank	820
270. Baring International Investment	819
271. G.T. Capital Mgmt.	806
272. Coldwell Banker Capital Mgmt.	800
273. C.S. McKee & Co.	800
274. First Security Investment Mgmt.	800
275. Mellon Real Estate	800
276. Crocker Nat'l Bank	791
277. Essex Investment Mgmt.	775
278. Jundt/Capen Associates	775
279. Stacey Braun Associates	774
280. Reimer & Koger	766
281. Mitchell Hutchins Asset Mgmt.	762
282. C.B. International Investments	750
283. Campbell Advisors	750
284. Tenneco Asset Mgmt.	750
285. Security Capital Real Estate	745
286. Dreman & Embry	732
287. Reams Asset Mgmt.	720
288. Schroder Capital Mgmt. Int'l	719
289. Frontier Capital Mgmt.	716
290. Smith Barney, Harris Upham	701
291. Marine Trust	700
292. MSecurities	695
293. First of America Investment Mgmt.	691
294. Lowe, Brockenbrough, Tierney	685
295. David L. Babson & Co.	672
296. Jones Lang Wootton Realty	650
297. Investors Research	647
298. Wells Fargo Realty Advisors	641
299. Marine Investment Mgmt.	634
300. GAMCO Investors	630
301. Third Nat'l Bank	630
302. First Wisconsin Nat'l, Madison	622
303. Texas American Investment Mgmt.	622
304. Seafirst Bank	618
305. William Blair & Co.	615
306. PRIMCO Capital Mgmt.	608
307. First City Nat'l Bank of Houston	606
308. TSA Capital Mgmt.	605
309. Alex. Brown Realty Advisors	600
310. MPT Associates	600
311. Sun Bank	600
312. Western Reserve Capital Mgmt.	600
313. BA Investment Mgmt. Int'l	592
314. Norstar Investment Advisory	588
315. Sterling Capital Mgmt.	587
316. Kingsley, Jennison, McNulty	581
317. Citizens Fidelity Bank & Trust	580
318. KR Capital Advisors	578
319. Lexington Mgmt.	575
320. SCNC Advisory	563
321. First Maryland Asset Mgmt.	560
322. Trident Investment Mgmt.	560
323. Lieber & Co.	556
324. Bessemer Trust	554
325. Anhalt/O'Connell	547
326. Minton/Newbold's Capital Mgmt.	540
327. Retirement System for Savings	538
328. Qualivest Capital Mgmt.	527
329. Riggs Nat'l Bank of D.C.	525
330. Sovran Bank	521
331. Valley Nat'l Bank of Arizona	518
332. Donald Smith & Co.	517

Managers ranked by tax-exempt assets

Manager	As of Jan. 1 ($ millions)
333. Morley Capital Mgmt.	515
334. Tom Johnson Investment Mgmt.	512
335. Brignoli, Curley & Roberts	501
336. Barnett Banks Trust	500
337. Hoisington Investment Mgmt.	500
338. Rothschild	500
339. NC Capital Mgmt. Group	490
340. Lehndorff & Babson Real Estate	481
341. Nicholas-Applegate Capital Mgmt.	478
342. Avatar Associates	472
343. Bank IV Wichita	469
344. Southeastern Asset Mgmt.	464
345. Estabrook Capital Mgmt.	450
346. Roanoke Asset Mgmt.	450
347. Lombard Odier International	448
348. Martin Currie	445
349. Weaver C. Barksdale	443
350. Mellon-Pictet International Mgmt.	439
351. NWQ Investment Mgmt.	437
352. BBL Capital Mgmt.	436
353. Haven Capital Mgmt.	436
354. Lomas & Nettleton	428
355. SAFECO Asset Mgmt.	425
356. Investment Counsel	424
357. Michigan Nat'l Investment	422
358. PCM International	422
359. Delafield Asset Mgmt.	421
360. RNC Capital Mgmt.	420
361. Renaissance Investment Mgmt.	420
362. Argus Investors Counsel	417
363. Tallasi Mgmt.	415
364. Sirach/Flinn, Elvins Capital Mgmt.	414
365. Columbus Circle Investors	410
366. W.H. Reaves & Co.	410
367. Colorado Nat'l Bank of Denver	400
368. Ferguson & Wellman	400
369. Mathers & Co.	400
370. Merganser Capital Mgmt.	390
371. Unity Mgmt.	390
372. Daniel Breen & Co.	386
373. McCullough, Andrews & Cappiello	385
374. Rice, Hall, James & Associates	385
375. First Nat'l Bank of Cincinnati	383
376. Wood, Struthers & Winthrop	375
377. NSR Asset Mgmt.	374
378. Landauer Advisors	370
379. Huntington Nat'l Bank	370
380. Alex. Brown Investment Mgmt.	369
381. Montag & Caldwell	363
382. Rampart Investment Mgmt.	363
383. L.J. Melody & Co.	362
384. Skye Investment Advisors	362
385. Am Cal	358
386. Wolf, Webb, Burk & Campbell	350
387. Fiduciary Mgmt. Associates	348
388. Home Life	348
389. Nomura Capital Mgmt.	345
390. Meridian Mgmt.	343
391. Ward & Wissner Capital Mgmt.	342
392. MIMLIC Asset Mgmt.	340
393. Federated Investment Counseling	334
394. Leavy Investment Mgmt.	330
395. Property Capital Associates	330
396. Union Planters Nat'l Bank	330
397. Wheat Investment Advisors	326
398. Gofen and Glossberg	325
399. Van Deventer & Hoch	325
400. William D. Witter	323
401. C-S Capital Advisors	320
402. Idaho First Nat'l Bank	312
403. Allstate Life	308
404. Froley, Revy Investment	306
405. United States Trust, Boston	305
406. Cramblit & Carney	302
407. Certus Financial	300
408. First Nat'l Bank of Omaha	300
409. Merchants Investment Counseling	300
410. Palmieri	300
411. Roulston & Co.	300
412. Seeco Capital	300
413. Gregory Smith & Sons	300
414. United Security Trust	300
415. IDS International	299
416. Webster Mgmt.	298
417. Degnan & Gillespie Fixed Income	295
418. Investment Advisors	291
419. J.W. O'Connor & Co.	290
420. Westwood Mgmt.	290
421. Commerce Bank of Kansas City	289
422. Cutler & Co.	286
423. Chicago Corp.	285
424. Cheswick, Gillespie & Robinson	280
425. Warburg Investment Mgmt. Int'l	280
426. Capital Trust	279
427. Verus Capital	278
428. Amivest Capital Mgmt.	277
429. Rothschild Asset Mgmt.	271
430. Hanson Investment Mgmt.	267
431. BMI Capital	260
432. Commerce Bank of St. Louis	260
433. Landmark Union Trust Bank	260
434. Ohio Co.	258
435. Matrix Capital Mgmt.	255
436. Pacific Century Group	250
437. Life Insurance Co. of Georgia	244
438. Bank of California	240
439. Dearden, Maguire & Weaver	240
440. Portfolio Group	240
441. Stock Yards Bank & Trust	240
442. Potomac Asset Mgmt.	235
443. Ashland Mgmt.	234
444. John McStay Investment Counsel	230
445. Hahn Holland & Grossman	226
446. AFA Financial	222
447. Capital Advisors	220
448. Magten Asset Mgmt.	217
449. Maryland Nat'l Bank	217
450. Kemper-Murray Johnstone Int'l	216
451. Furman Selz Capital Mgmt.	215
452. Nelson, Benson & Zellmer	214
453. Daiwa International Capital Mgmt.	213
454. Capitol Bank & Trust	211
455. Eagle Asset Mgmt.	208
456. Johnson, Valliant & Broadfoot	207
457. Mortgage Investors Group	202
458. Quest Advisory	200
459. First Interstate Investment	191
460. Disciplined Investment Advisors	190
461. Rosenberg Institutional Equity	188
462. M. Pescatello & Co.	186
463. Winchester Capital Mgmt.	186
464. Kempner Capital Mgmt.	185
465. Chase Investment Counsel	184
466. Chittenden Bank	183
467. Tower Capital Mgmt.	183
468. Bank of Delaware	180
469. Leylegian Investment Mgmt.	180
470. Tuttle & Noroian	180
471. Markston International	178
472. Crabbe-Huson	177
473. Abel/Noser	175
474. Smith Affiliated Capital	175
475. Trevor Stewart Burton & Jacobson	175
476. Tukman Capital Mgmt.	170
477. Garrison, Keogh & Co.	168
478. MassCo Investment Mgmt.	161
479. Bartlett & Co.	160
480. Equitable Bank	160
481. ValueQuest	157
482. Friess Associates	152
483. Kleinwort Benson International	151
484. Morison Asset Mgmt.	151
485. Astrop Advisory	150
486. Burnham & Co.	150
487. Prudential Bache Investment	150
488. Republic Nat'l Bank of New York	150
489. Schupf, Woltman & Co.	150
490. George B. Springman	150
491. Virginia Investment Counselors	150
492. Cambiar Investors	148
493. Summit Mgmt.	148
494. E.W. Axe & Co.	146
495. C.J. Lawrence Mgmt.	146
496. Stephens Capital Mgmt.	144
497. Winrich, Schaenen & Wood	143
498. Breau Capital Mgmt.	140
499. Johnson Investment Counsel	137
500. CM&M Asset Mgmt.	136
501. Kirkpatrick, Pettis, Smith, Polian	136
502. Baxter & Hoops	135
503. Ivory & Sime International	135
504. Penmark Investments	130
505. Gulf Investment Mgmt.	128
506. Heartland Capital Mgmt.	128
507. Kahn Brothers & Co.	128
508. Great American Reserve	127
509. Merchants Nat'l Bank of Muncie	126
510. Dana Investment Advisors	125
511. Wedge Capital Mgmt.	125
512. Wilson, Kemp & Associates	125
513. Kurtz Capital Mgmt.	123
514. Thompson/Rubinstein Investment	123
515. Julius Baer Investment Mgmt.	120
516. Lieberman Companies	120
517. Securities Counselors of Iowa	120
518. Siphron & Meyers	120
519. Capital Mgmt. International	119
520. Glendeven Mgmt. and Research.	118
521. Growth Stock Outlook	117
522. PMRealty Advisors	117
523. Aetna MIM Asset Mgmt.	115
524. Liberty Capital Mgmt.	113
525. Fiduciary Counsel	112
526. Target Investors	110
527. Seattle Trust	108
528. Wasatch Advisors	107
529. California First Capital Mgmt.	102
530. IDS Growth Spectrum Advisors	102
531. Stuyvesant Capital Mgmt.	102
532. Investors Research	101
533. Pacific Asset Mgmt.	101
534. Integrated Asset Mgmt.	100
535. Pilgrim Mgmt.	100
536. Cowen Asset Mgmt.	99
537. P.E. Becker	96
538. Lipper Analytical Services	94
539. Delta Financial	92
540. Old Stone Trust	92
541. Arnhold & S. Bleichroeder Int'l	91
542. Corbyn Associates	90
543. Seagate Capital Mgmt.	90
544. James Investment Research	89
545. Campbell, Newman, Pottinger	88
546. Carret & Co.	88
547. Delafield, Harvey, Tabell	88
548. Fiske Capital Mgmt.	86
549. Evans & Moxon Capital Mgmt.	84
550. Lotsoff Capital Mgmt.	82
551. Legg Mason Capital Mgmt.	82
552. Noddings-Calamos Asset Mgmt.	82
553. American Asset Mgmt.	81
554. QCI	80
555. Saybrook Capital	80
556. PM Portfolio Mgmt.	79
557. Investors Mgmt. Services	79
558. Dietche & Field Advisers	78
559. Wertheim-Philippe International	78
560. Gintel Equity Mgmt.	77
561. Lindner Mgmt.	77
562. Cullen Center Bank & Trust	77
563. Portfolio Capital Mgmt.	76
564. Financial Trust	76
565. Wardley Marine International	76
566. CIMG	75
567. Churchill Mgmt.	75
568. Crawford Investment Counsel	75
569. American Express Asset Mgmt.	74
570. JCB Asset Mgmt.	72
571. McBryan, Malone & Russell	72
572. Sullivan, Morrissey & Mickle	72
573. Farmer & Lang	71
574. Andron Cechettini & Associates	70
575. Equitec Institutional Realty	70
576. A.R. Schmeidler & Co.	70
577. Illinois Co.	68
578. First Boston Asset Mgmt.	67
579. Wakley & Roberton	66
580. D.A. Mgmt.	65
581. Ferris Investment Advisory	65
582. Rothschild Securities	65
583. Thorson, Brown & Plunkett	65
584. Argus Investment Mgmt.	64
585. Gateway Investment Advisers	64
586. Greenspan O'Neil Associates	64
587. Alan G. Seidner Co.	64
588. Cadinha & Co. Inc.	63
589. Kronwall Capital Mgmt.	62
590. Oregon Bank	61
591. Bailard, Biehl & Kaiser	60
592. Gradison & Co.	60
593. Greenwich Monitrend	60
594. Merchants Nat'l Bank	60
595. Union Nat'l Trust	60
596. Security Nat'l Bank of Sioux City	60
597. Ambs Investment Counsel	59
598. Kennedy Capital Mgmt.	59
599. Maritime Asset Mgmt.	58
600. Jones, Mathers, Casamento & Co.	57
601. Bank of Tokyo Trust	56
602. DP Asset Mgmt.	56
603. Baillie Gifford Overseas	55
604. Hutchinson Nat'l Bank & Trust	55
605. Jenswold, King & Associates	55
606. Starwood	55
607. Ashfield & Co.	54
608. Donald P. Chiras	54
609. Kanne, Paris & Hoban	54
610. McMillion/Eubanks Capital Mgmt.	54
611. Research Associates Mgmt.	54
612. Yamaichi Capital Mgmt.	53
613. E.M. Graves Investment Mgmt.	52
614. Connors Investor Services	51
615. AEI/American & European	50
616. Amev Asset Mgmt.	50
617. Anchor Capital Advisors	50
618. Aronson & Fogler	50
619. BankEast Trust	50
620. Clutinger, Williams & Verhoye	50
621. Cumberland Advisors	50
622. First City Bank of Dallas	50
623. GIMI	50
624. Institutional Portfolio Services	50
625. Walter Scott International	50
626. G. Waring Boys	50
627. Bounty Mgmt.	47
628. Narragansett Capital	47
629. Alexander, Scriver & Associates	46
630. Capital Technology	46
631. Financial Aims	46
632. Jamison, Eaton & Wood	46
633. C.H. Brown	45
634. First Quadrant	45
635. Lesesne & Co.	45
636. SBC Portfolio Mgmt. International	41
637. Composite Research & Mgmt.	40
638. Fields Investment Group	40
639. Franklin Asset Mgmt.	40
640. William J. Kautz Associates	40
641. Shaw Mgmt.	40
642. Van Eck Investments	40
643. Robshaw & Cheskin Associates	39
644. American Capital Mgmt.	38
645. Commerce Investment Mgmt.	38
646. Providence Group Investment	37
647. Marsh & Cunningham	36
648. Parmelee Mgmt.	36
649. Dale K. Ehrhart	35
650. Ronald Sadoff Associates	35
651. Cramer, Rosenthal, McGlynn	34
652. Simms Capital Mgmt.	34
653. Dawes Investment Service	33
654. Palley-Needelman Asset Mgmt.	33
655. Sutro Capital Mgmt.	33
656. Systematic Financial Mgmt.	33
657. Calcasieu Marine Nat'l Bank	32
658. Davenport Asset Mgmt.	32
659. Nikko & Associates	32
660. FMI Capital Mgmt.	32
661. Cedar Hill Associates	31
662. Hambrecht & Quist Equity Mgmt.	31
663. KRM Mgmt.	31
664. Acquest Capital Mgmt.	30
665. NorthWest Quadrant	30
666. D.J. Investment Advisors	27
667. Douglas, Noyes & Co.	27
668. New Mexico Capital Mgmt.	27

Managers ranked by tax-exempt assets

Manager	As of Jan. 1 ($ millions)
669. Venture Capital Fund, N. England	27
670. Ariel Capital Mgmt.	26
671. R.W. Graybill	26
672. Reiser-Builder	26
673. Capital Counseling Service	25
674. Davis, Weaver & Mendel	25
675. Pension Mgmt.	25
676. Professional Asset Mgmt.	24
677. Hayden, Tolzmann & Associates	24
678. Berry Hartell & Evers	23
679. Swiss American Asset Mgmt.	23
680. Dixon & Hubard	20
681. Fraser Mgmt. Associates	20
682. Ganz Associates	20
683. Interstate Asset Mgmt.	20
684. James River Capital Mgmt.	20
685. W.R. Lazard & Co.	20
686. MRealty	20
687. Meridian Capital Mgmt.	20
688. PSM Investors	20
689. Pell, Rudman & Co.	20
690. Technological Investors Mgmt.	20
691. Waycross Investment Mgmt.	20
692. Fisher Investments	18
693. O'Herron & Co.	18
694. Somerset Asset Mgmt.	18
695. T.J. Holt & Co.	17
696. R.M. Leary & Co.	17
697. Trendstat Capital Mgmt.	17
698. Ariston Capital Mgmt.	16
699. Beese, Fulmer & Pincoe	16
700. Foreign & Colonial Asset Mgmt.	16
701. Britannia International Asset Mgmt.	15
702. Fenner & Williams	15
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706. Palm Beach Capital Mgmt.	14
707. Parker Dillon Carlson & Johnson	14
708. Sabl Associates	14
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714. Philadelphia Investment Mgmt.	12
715. Piedmont Capital Mgmt.	12
716. Puget Sound Nat'l Bank	12
717. State Street Research & Mgmt.	12
718. Allocation Advisors	11
719. American Agricultural Investment	11
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721. Paul A. Merriman & Associates	11
722. Milbank Tanaka & Associates	11
723. Muhlenkamp and Co.	11
724. Zavanelli Portfolio Research	11
725. Oakwood Counselors	11
726. Princeton Asset Mgmt.	11
727. Furgueson Capital Mgmt.	11
728. Addison Capital Mgmt.	10
729. Catanzarite Investment Advisors	10
730. Mercator Asset Mgmt.	10
731. MidAmerica Mgmt.	10
732. RPI Institutional Services	10
733. T.W. Richardson & Co.	10
734. Safian Investment Research	10
735. Simmons Financial Mgmt.	10
736. Tamarack Investment Counsel	10
737. Unified Mgmt.	10
738. Campbell Group	9
739. Sheffield & Co.	9
740. Kenneth J. Gerbino & Co.	9
741. Bostian Research Associates	8
742. John M. Cunningham	8
743. Investment Mgmt.	8
744. Sumitomo Bank of California	8
745. Bank of the West	7
746. Buffalo Capital	7
747. David E. Ware & Associates	7
748. Fiduciary & Corporate Counsel	7
749. Wm. A. Inskeep & Co.	7
750. Newhard, Cook Advisory Services	7
751. Simpson Capital Mgmt.	7
752. F.A. Spina & Co.	7
753. Trascott, Alyson, Craig	7
754. Weiser Investment Mgmt.	7
755. Santaularia & Associates	7
756. AFC Advisory Services	6
757. Copper Beech Capital Services	6
758. DeJarnette Investment Advisors	6
759. KAS Investment Consultants	6
760. Portfolio Timing	6
761. Robert M. Walker & Associates	6
762. Wagstaff, Lodefink & Associates	6
763. Applied Portfolio Disciplines	5
764. Clifford Associates	5
765. RAC Advisors	5
766. Midwest Group/R.H. Leshner & Co.	4
767. Townsend Asset Mgmt	4
768. Knowles & Hazlett	3
769. Computime Institutional Services	3
770. Platner & Associates	3
771. Westminster Realty Advisors	3
772. Kreger Capital Mgmt.	3
773. Bank of Oklahoma, Tulsa	2
774. First Investors Equity Mgmt.	2
775. James T. Cambier Investments	2
776. Leonard Mgmt. Group	2
777. Newport Pacific Mgmt.	2
778. North American Capital Mgmt.	2
779. James Punderson & Co.	2
780. First Kentucky	1
781. Albion Mgmt. Group	1
782. Glickenhaus & Co.	1
783. D. Jones & Co.	1
784. Stratton Capital Mgmt.	1
785. Wagner & Hamil	1
786. Tel Advisors	1
787. Macheski/Pappas Asset Mgmt.	0
788. Lingo Capital Mgmt.	0
789. ACP Advisers	0
790. AMB Investments	0
791. Adams Express	0
792. Agepasa	0
793. Agrivest	0
794. Boston Financial Real Estate	0
795. Commodity Mgmt. Service	0
796. Credit Suisse First Boston	0
797. Davis/Dinsmore Mgmt.	0
798. European-American Securities	0
799. Hedged Portfolio Advisors	0
800. Kangyo Kakumaru Capital Mgmt.	0
801. MFM Capital Mgmt.	0
802. New Japan Capital Mgmt.	0
803. Nicholson Group	0
804. Petroleum & Resources	0
805. Smith Breeden Associates	0
806. United Trust Fund	0
807. Wagner Southern Forest	0
TOTAL	1,216,123

Investment Advisors

to pension and profit sharing plans
...and the substantial investor

The cornerstone philosophy of David J. Greene and Company was established nearly a half century ago. The preservation and appreciation of capital through investment in undervalued securities and special situations was then, is now and will continue to be, the governing principle of our investment concepts.

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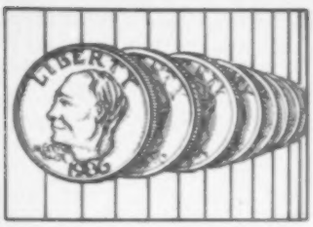

a

Abel/Noser Corp.

90 Broad St., New York, N.Y. 10004; (212) 344-2610

Total assets managed	$175,000,000
Tax-exempt assets managed	$175,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	3

Abel/Noser Corp. is a low-p/e equity manager investing in undervalued stocks with high earnings momentum, whose recently reported earnings are greater than the street consensus.

The asset mix Jan. 1 was 98% stocks and 2% cash.

Clients include Honeywell, Springs Industries and UFCW Union.

Kent Associates Inc. is the money management arm of Abel/Noser.

Eugene A. Noser Jr., president, is chief investment officer. Richard T. McSherry, executive vice president, is client contact.

ACP Advisers Inc.

400 Park Ave., New York, N.Y. 10022; (212) 826-9700

Total assets managed	$334,000,000
Tax-exempt assets managed	$0
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	4

ACP Advisers Inc. is a real estate manager whose strategy is to acquire underperforming real estate assets, then provide the capital infusion and management expertise so the properties achieve their full potential. The objective is to enhance income return and realize significant capital appreciation in two to five years.

American Continental Properties is the parent company.

Daniele D. Bodini, president, is chief investment officer. Debra Flanz, vice president-new business development, is client contact.

Acquest Capital Management Inc.

300 E. Long Lake Road, Suite 280, Bloomfield Hills, Mich. 48013; (313) 645-5130

Total assets managed	$40,000,000
Tax-exempt assets managed	$30,000,000
Real estate assets managed	$30,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	6
Types of accounts managed	CJ
No. of portfolio managers	3
Size of research staff	3

Acquest Capital Management Inc., a real estate manager, places emphasis on product knowledge, market research, sophisticated financial analysis, development skills, management control and integrity in its approach.

The asset mix as of Jan. 1 was 80% equity real estate and 20% mortgages.

The net gain in new tax-exempt business was $10 million in 1985; two clients were added.

David G. Ong, president, is chief investment officer and client contact.

The Adams Express Co.

201 N. Charles St., Baltimore, Md. 21201; (301) 752-5900

Total assets managed	$438,000,000
Tax-exempt assets managed	$0
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	0

The Adams Express Co. is an equity risk averse, emphasizing value, quality and investment merit of each security. Risk containment is based on earnings and dividend growth, conservative valuation and price discipline. Options are used.

Adams Express Co. owns 10% of Petroleum & Resources Corp., Baltimore. Together, the companies manage $706 million in assets.

W.D. MacCallan, chairman, is chief investment officer. Monica C. Loh, vice president-investment advisory services, is client contact.

Addison Capital Management

1435 Walnut St., Philadelphia, Pa. 19102; (215) 568-2600

Total assets managed	$95,000,000
Tax-exempt assets managed	$10,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	7
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	1

Addison Capital Management is an equity and balanced manager.

The firm has a value-oriented, contrarian equity philosophy, employing a broadly diversified list of out-of-favor stocks drawn from a mixture of capitalization sizes.

Its fixed-income approach is passive.

The asset mix Jan. 1 was 77% stocks, 22% bonds and 1% cash.

Jay R. Massey, managing partner, and Radcliffe Cheston, general partner, are chief investment officers. James S. Lobb, director of client services, is client contact.

Aegis Capital Management

100 Park Ave., Suite 2302, New York, N.Y. 10017; (212) 889-2777

Total assets managed	$43,000,000
Tax-exempt assets managed	$12,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	13
Types of accounts managed	C
No. of portfolio managers	2

Aegis Capital Management Corp. exclusively manages hedged fixed-income and hedged equity programs.

In equities, the firm uses fundamental, sector rotation and replacement analysis in sectors.

In fixed income, the firm synthetically converts five- to 20-year government portfolios into what is effectively a 91-day liquidity investment.

The asset mix Jan. 1 was 100% stocks.

Henry M. Pounds, president, is chief investment officer for equities and Jonathan B. Greenspan, vice president, for fixed income. Thomas P. Zucceky, vice president, is client contact.

AEI/American & European Investment Corp.

4550 Montgomery Ave., Suite 830N, Bethesda, Md. 20814; (301) 657-9700

Total assets managed	$150,000,000
Tax-exempt assets managed	$50,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	1
Types of accounts managed	F
No. of portfolio managers	2
Size of research staff	1

AEI/American & European Investment Corp. is a fixed-income manager.

Its active strategy balances liquidity and return objectives with explicit risk management using scenario forecasting and efficient frontier asset allocation.

As of Jan. 1, 100% of the firm's tax-exempt assets were in bonds.

The firm was started in January 1985.

Hugo J.H. Schielke, chairman, is chief investment officer. George P. Stasen, president, is client contact.

Aetna Capital Management

145 King St. West, Toronto, Ontario M5H 3T7; (416) 864-3782

Total assets managed	$480,000,000(U.S.)
Tax-exempt assets managed:	
Total	$436,000,000
For subsidiaries of U.S. firms	$47,000,000
Real estate assets managed	$155,000,000
Minimum separate account	$3,000,000
Tax-exempt clients: Total	44
No. of portfolio managers	4
Size of research staff	3

Aetna Capital Management Ltd., a Canadian firm, manages equity, fixed-income, balanced and real estate accounts.

Its equity approach is a careful balance of sector rotation and growth stock selection.

Its fixed-income approach is a high yield/low volatility orientation balanced with spread trading, including bond/mortgage shifts, and moderate movement along the yield curve.

As of Jan. 1, the asset mix was 19% Canadian stocks, 13% bonds, 36% cash, 4% equity real estate and 28% mortgages.

William H. Alexander, president, is chief investment officer. Judith A. Lake, assistant vice president, is client contact.

Parent company is Aetna Canada.

Aetna Life and Casualty Co.

151 Farmington Ave., Hartford, Conn. 06156; (203) 273-0123

Total assets managed	$51,885,000,000
Tax-exempt assets managed:	
Total	$31,841,000,000
Pooled accounts	$4,183,000,000
Separate accounts	$3,335,000,000
Real estate assets managed	$2,930,000,000
401(k) and 457 assets managed	$3,350,000,000
GICs	$11,691,000,000
Annuities	$380,000,000
Other	$12,272,000,000
Indexed/dedicated assets	$196,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CFGJ
No. of portfolio managers	25
Size of research staff	65

Aetna Life and Casualty Co. offers equity, fixed-income, balanced and real estate capabilities.

The equity approach emphasizes companies with positive future earnings momentum and superior relative p/es. Stocks are selected from a universe of companies with generally superior financial characteristics.

The fixed-income approach controls market risk while emphasizing cash flow and value.

In real estate, Aetna seeks strong initial cash returns through acquisition techniques and frequent use of tax-efficient structures. Investments are managed aggressively and have a disciplined sales program.

The asset mix Jan. 1 was 35.8% stocks, 5.4% bonds, 19% cash, 27.2% equity real estate, 11.6% mortgages and 1% indexed.

Aetna is affiliated with Aetna Life Insurance Co., Aetna Capital Management Inc., Aetna Realty Investors Inc. and Aetna MIM, which offers international capabilities.

Donald G. Conrad, executive vice president and chief financial officer, is chief investment officer. Client contact is T. Jerald Moore, vice president.

Aetna MIM Asset Management Ltd.

151 Farmington Ave. MB64, Hartford, Conn. 06156; (203) 636-6251

Total assets managed	$185,000,000
Tax-exempt assets managed	$115,000,000
International assets managed	$115,000,000
Tax-exempt clients	60
Types of accounts managed	CEFG
No. of portfolio managers	39

Aetna MIM Asset Management Ltd. is an international manager.

The firm is a top-down/bottom-up manager that maximizes total return through a diversified portfolio using predetermined risk parameters.

In fixed income, the firm places greater emphasis on changes in maturity and currency composition than anomaly hedging.

As of Jan. 1, the asset mix was 94% stocks and 6% cash.

The firm is a joint venture between Aetna Life & Casualty Co. and MIM Ltd.

David R. Stevens, chairman, is chief investment officer. Christian W. Thwaites, assistant vice president, is client contact.

AFA Financial

525 Hanna Bldg. Cleveland, Ohio 44115; (216) 861-1050

Minimum separate account	$100,000
Tax-exempt clients	217
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	2

AFA Financial is an equity manager using a Graham & Dodd approach. Stocks are screened to eliminate financial, business and market risk to a defined universe of 190 high-quality securities whose yield makes them eligible for purchase.

On the fixed-income side, only high-coupon government issues or AAA bonds are purchased, with maturities based on the interest rate and M1 fluctuations.

The asset mix Jan. 1 was 52% stocks, 5% bonds and 43% cash.

The $72 million net gain in new tax-exempt business for 1985 was $70.8 million in equities and $1.2 million in fixed income.

Clients include Lamson & Sessions, Brush Wellman, Judson Brooks and FabriCenters of America.

Abraham Feldesman, president, is chief investment officer; Debra L. Collins, vice president, is client contact.

AFC Advisory Services Inc.

8555 16th St., No. 701, Silver Spring, Md. 20910; (301) 588-5000

Total assets managed	$15,000,000
Tax-exempt assets managed	$6,000,000
401(k) and 457 assets managed	$100,000
Tax-exempt clients	25
Types of accounts managed	CJ
No. of portfolio managers	1
Size of research staff	3

ages equity, fixed-income, balanced, real estate and international portfolios.

Its equity approach is based on market timing, emerging growth and growth stock selection. A trend analysis model is used to move to 100% cash when conditions warrant.

In fixed income, the firm uses a retrospective approach using trend analysis.

The firm has not invested in real estate since January 1983, but says it might within a year or two.

As of Jan. 1, the asset mix was 70% stocks and 30% bonds.

Barry L. Cliff is chief investment officer and client contact.

Agepasa

Plaza de las Cortes 4, Madrid, Spain 28014; (011) 341-429-0096

Total assets managed	$50,000,000
Tax-exempt assets managed	$0
Minimum separate account	$50,000
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	2

Agepasa, an equity and international

Profile statistics at a glance

Total managers profiled	**848**
Banks, trusts cos., subsidiaries	187
Insurance cos., subsidiaries	89
Investment counselors	550
Canadian managers*	40
Total portfolio managers employed*	**5,479**
Total security analysts employed*	**4,572**
Stocks watched closely (avg.):	
By banks	149
By insurance companies	145
By investment counselors	154
Stocks watched generally (avg.):	
By banks	573
By insurance companies	451
By investment counselors	639
Percentage of in-house research (avg.):	
By banks	40
By insurance companies	48
By investment counselors	50
No. of managers using options	**220**
No. of managers using stock-index futures	**91**
No. of managers using fixed-income futures	**82**
Total assets managed ($ millions)	**2,132,595**
Top 200	1,809,726
Top 100	1,480,454
Tax-exempt assets managed ($ millions)	**1,216,213**
Top 200	1,038,997
Top 100	842,847
Tax-exempt assets managed ($ millions):	
Banks, trust cos. and subsidiaries	450,512
Insurance cos. and subsidiaries	369,218
Investment counselors	396,393
Real estate assets managed ($ millions)	**83,107**
Equity real estate	48,155
International assets managed ($ millions)	**32,622**
Equity	23,780
Bonds	7,578
Cash	1,264
Assets invested in GICs ($ millions)	**86,127**
Assets invested in 401(k)/457 plans ($ millions)	**29,532**

*All other statistics exclude Canadian managers

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisory only)

anager, opened January 1986. It vests in the Madrid stock market in ery discounted issues with low p/e nd high yield and in growth stocks. It ses technical analysis (for market ming) and sector analysis.

For fixed income, it uses interest te anticipation, investing in Euro-onds.

Clients include Banco Exterior, Caja arcelona and Caja Ahorros Bilbao.

Jose Luis Varez, president, is chief vestment officer. Jose Luis Diaz and art Douglas are client contacts.

AgriVest

00 Winding Brook Drive, Glastonbury, Conn. 06033; (203) 659-3711

otal assets managed	$500,000,000
ax-exempt assets managed	$0
inimum separate account	$5,000,000
o. of portfolio managers	3

AgriVest, a real estate manager, oncentrates on conservative, value-riented investments, both equity and ebt, in prime agricultural real estate in the major agricultural regions of the United States.

George E. Schwab, president, is chief investment officer. James B. McCandless, executive vice president, is client contact.

Albion Management Group

Alta Lodge, Alta, Utah 84092; (801) 742-3500

Total assets managed	$12,000,000
Tax-exempt assets managed	$1,000,000
Minimum separate account	$250,000
Tax-exempt clients	6
Types of accounts managed	C
No. of portfolio managers	2

Albion Management Group is an equity manager.

Its equity approach uses Graham & Dodd principles, looking for long-term growth potential and undervalued securities of well-managed companies with strong market position, strong insider buying, low p/e ratios and low institutional ownership.

Options are used.

The asset mix Jan. 1 was 77% stocks, 16% bonds and 7% cash.

William Toby Levitt, president, is chief investment officer. Amy Shaw, director of marketing, is the client contact.

Aldrich, Eastman & Waltch

265 Franklin St., Boston, Mass. 02110; (617) 439-9000

Total assets managed	$1,500,000,000
Tax-exempt assets managed	$1,500,000,000
Minimum separate account	$100,000,000
Types of accounts managed	CEG
No. of portfolio managers	10
Size of research staff	10

Aldrich, Eastman & Waltch Inc. is a real estate manager that had 100% of its assets in real estate as of Jan. 1.

Investments are primarily equity and equity-oriented debt (participating convertible and real return mortgages) emphasizing current yield, capital preservation, inflation protection and tax efficiency.

Thomas G. Eastman, principal, is chief investment officer. G. William Helm Jr., principal, is client contact.

Alexander, Scriver & Associates Inc.

1099 18th St., Suite 2810, Denver, Colo. 80202; (303) 296-1858

Total assets managed	$127,000,000
Tax-exempt assets managed	$46,000,000
International assets managed	$12,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$150,000
Tax-exempt clients	53
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	1

Alexander, Scriver & Associates, a balanced manager, uses Graham & Dodd and quantitative approaches to stocks, looking for overreactions in markets by analyzing price information quantitatively and later applying more traditional techniques to establish value.

For fixed income, it employs interest rate anticipation and sector analysis using its own internally generated, proprietary, quantitative techniques.

The asset mix Jan. 1 was 53% stocks, 4% bonds and 43% cash.

The firm is a wholly owned subsidiary of Chemical New York Corp.

Gerald H. Scriver, president, is chief investment officer. Robert J. Reed, senior vice president, is client contact.

Fred Alger Management Inc.

75 Maiden Lane, New York, N.Y. 10038; (212) 806-8800

Total assets managed	$2,514,000,000
Tax-exempt assets managed	$2,413,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	71
Types of accounts managed	CFG
Size of research staff	30

Fred Alger Management Inc. is an equity manager whose goal is to position its portfolio on the leading edge of the market, using a bottom-up approach to individual growth stock selection.

The asset mix Jan. 1 was 97% stocks and 3% cash.

Six tax-exempt equity clients were added in 1985.

Clients include ABC, Fruehauf and the states of Alaska and Minnesota.

Fred Alger, president and chairman, is chief investment officer. Krista M. Woodall, vice president-client service, is client contact.

Alliance Capital Management

140 Broadway, 41st Floor, New York, N.Y. 10005; (212) 902-4114

Total assets managed	$23,271,000,000
Tax-exempt assets managed	$18,895,000,000
Real estate assets managed	$2,759,000,000
International assets managed	$123,000,000
Passive assets managed	$1,209,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	328
Types of accounts managed	CEFGJ
No. of portfolio managers	43
Size of research staff	13

Alliance Capital Management Corp. is an equity, fixed-income, balanced and international manager. The firm's equity approach is common stock selection with emphasis on growth-oriented and small-cap companies. The firm seeks to recognize changing secular fundamentals early on and to concentrate holdings in companies and/or groups of companies that are expected to benefit as the changes are broadly recognized.

Moderate market timing describes the fixed-income approach used.

Options, stock index futures and fixed-income futures are used.

The mix of tax exempt assets as of Jan. 1 was 73% stocks, 23% bonds (including mortgage-backed securities) and 4% cash.

Half of the research is generated internally, with 300 stocks followed closely and 450, generally.

Alliance Capital is an indirect wholly owned, independently operated subsidiary of The Equitable Life Assurance Society of the United States.

Chief investment officer is Dave H. Williams, chief executive officer. Jon S. Fossel, director of marketing, is client contact.

Allocation Advisors Inc.

27520 Hawthorne Blvd., Suite 162, Rolling Hills Estates, Calif. 90274; (213) 377-4860

Total assets managed	$11,000,000
Tax-exempt assets managed	$11,000,000
Minimum separate account	$500,000
Tax-exempt clients	4
Types of accounts managed	CJ
No. of portfolio managers	1

Allocation Advisors Inc., an equity manager, uses market timing in its equity approach.

The firm was 100% invested in stocks as of Jan. 1. The firm also has about $35,000 in international markets.

All of the firm's assets and clients were acquired in 1985.

Scott M. Smathers, president, is chief investment officer and client contact.

Allstate Life Insurance Co.

Allstate Plaza, Northbrook, Ill. 60062; (312) 480-2973

Total assets managed	$2,692,000,000
Tax-exempt assets managed	$308,000,000
GICs	$211,000,000
Annuities	$97,000,000
Types of accounts managed	CEFG
No. of portfolio managers	9

Nobody has ever kept an eye on more than half the ball. Until now.

Did you know that the U.S. represents only half of the world bond market? At MFS, we've known it for years. We keep our eyes on both halves of the ball. That's why we can offer you the whole world.

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The global fixed-income managers

MFS™ Massachusetts Financial Services • Investment Counsel Division

200 Berkeley Street, Boston, Massachusetts 02116 (617) 423-3500

Allstate Life Insurance Co. specializes in guaranteed investment contracts and annuities, taking an asset/liability matching approach.

As of Jan. 1, the asset mix of general account assets backing the GICs and annuities was 13.3% stocks, 50.8% bonds, 0.4% cash, 2% equity real estate, 6.3% mortgages, 23.4% mortgage-backed securities and 3.8% other.

Clients include Whirlpool, Dayton Power & Light, Detroit Fire and Police and Hercules.

Chief investment officer is Wayne E. Hedien, vice chairman, treasurer and chief financial officer. Client contact is John P. Wilson, director-group pension marketing.

Amalgamated Bank of New York

11-15 Union Square West, New York, N.Y. 10003; (212) 255-6200

Total assets managed	$1,600,000,000
Tax-exempt assets managed:	
Total	$1,600,000,000
Separate accounts	$1,600,000,000
Tax-exempt clients	100
Types of accounts managed	J
No. of portfolio managers	5

Amalgamated Bank of New York, a fixed-income manager, invests in U.S. government/agency bonds with five-year maximum maturities. The active manager adjusts cash according to its interest rate forecast.

The asset mix Jan. 1 was 94% bonds and 6% cash.

Clients include National ILGWU, National Maritime Union, National Hospital & Health Care Employees and United Furniture Workers of America.

Richard Cohen, vice president and senior trust officer, is chief investment officer and client contact.

AMB Investments Inc.

4 Embarcadero Center, 35th Floor, San Francisco, Calif. 94111; (415) 956-5100

Total assets managed	$130,000,000
Tax-exempt assets managed	$0
Minimum separate account	$30,000,000

AMB Investments Inc. is a real estate manager.

The firm concentrates on target markets in the West with strong demographics and supply constraints in master-planned areas. The focus is on substantially leased projects with minimal leasing exposure over the near term because of overbuilt markets. Douglas D. Abbey, president, is chief investment officer and client contact.

Ambs Investment Counsel

1501 McKay Tower, Grand Rapids, Mich. 49503; (616) 454-4535

Total assets managed	$103,000,000
Tax-exempt assets managed	$59,000,000
International assets managed	$1,000,000
Minimum separate account	$250,000
Tax-exempt clients	7
Types of accounts managed	CEF
No. of portfolio managers	1

Ambs Investment Counsel Inc. is a balanced manager. In equities, selection stresses earnings momentum and below-average p/e ratios.

The firm's fixed-income approach is based on sector analysis, focusing on the "cheap" part of the yield curve with swaps considered when attractive.

As of Jan. 1, the asset mix was 41% stocks, 43% bonds and 16% cash.

Clients include Christian School pension plan, Heat Controller profit-sharing plan and Kendall Memorial School endowment.

Keith L. Ambs is president, chief investment officer and client contact.

Am Cal Co.

4730 Woodman Ave., Suite 220, Sherman Oaks, Calif. 91423; (818) 990-3250

Total assets managed	$358,000,000
Tax-exempt assets managed	$358,000,000
Real estate assets managed	$358,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	6
Types of accounts managed	GJ
No. of portfolio managers	4
Size of research staff	3

Am Cal Co., a real estate manager, uses a conservative approach based on cash-on-cash return with internal rates of return secondary. Preservation of capital investment is primary.

The tax-exempt asset mix Jan. 1 was 35% equity real estate and 65% mortgages.

The net gain in new tax-exempt business in 1985 was $40 million; one client was added.

Clients include the Missouri State Employees' Retirement System, Carpenters Pension Trust for Southern California and the Hawaii Masons.

James B. McKenna, president, is chief investment officer. S.Q. Della-Grotta, executive vice president, is client contact.

American Agricultural Investment Management

2603 W. 22nd St., Suite 17, Oak Brook, Ill. 60521; (312) 654-6616

Total assets managed	$19,000,000
Tax-exempt assets managed	$11,000,000
Real estate assets managed	$11,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	CJ
No. of portfolio managers	1

American Agricultural Investment Management Co. Inc. invests in prime farmland leased for maximum long-term rental returns. Holdings are diversified as to commodity production and geographic dispersion. Long-term investments are made for real value growth.

Clients are Owens-Illinois and Teamsters Affiliates.

H. Joseph Bourn, president, is chief investment officer and client contact.

25 largest insurance companies*

Rank	Managers	$ millions
1.	Prudential Asset Management Group	61,968
2.	Equitable Life Assurance Society	54,401
3.	Metropolitan Life Insurance	38,728
4.	Aetna Life and Casualty	31,881
5.	New England Mutual Life Insurance	21,189
6.	Travelers Companies	20,557
7.	CIGNA	18,000
8.	John Hancock Financial Services	15,100
9.	Pacific Financial Companies	13,280
10.	New York Life Insurance	11,000
11.	Bankers Life	10,753
12.	Massachusetts Mutual Life Insurance	6,600
13.	Marsh & McLennan Companies (Putnam)	5,687
14.	Mutual Benefit Life	5,398
15.	MONY Financial Services	4,903
16.	Lincoln National Life Insurance	4,614
17.	Kemper Financial Services	3,559
18.	Transamerica Investment Services	3,354
19.	Union Mutual Life Insurance	3,209
20.	Nationwide Insurance Companies	3,119
21.	Continental Assurance	2,897
22.	Provident National Assurance	2,677
23.	Mutual of America Life Insurance	2,545
24.	Northwestern National Life Insurance	2,506
25.	Connecticut Mutual Life Insurance	1,799
	TOTAL	348,654

* includes subsidiaries

American Asset Management Co.

1500 Society Building, Cleveland, Ohio 44114; (216) 781-8899

Total assets managed	$228,000,000
Tax-exempt assets managed	$81,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	40
Types of accounts managed	CEF
No. of portfolio managers	3

American Asset Management Co. is an equity, fixed-income and balanced manager.

In equities, the firm purchases high-quality securities with low p/e ratios, above-average yields, good earnings visibility and high asset values.

In fixed income, interest rate anticipation is used. Government, agency and high-quality corporate bonds are purchased with maturities not greater than 10 years. The asset mix Jan. 1 was 60% stocks and 40% bonds.

Joseph Thomas, president, and James DiFiore, executive vice president, are the investment officers. Mr. Thomas is client contact.

American Capital Management Inc.

90 Broad St., New York, N.Y. 10004; (212) 344-3300

Total assets managed	$40,000,000
Tax-exempt assets managed	$38,000,000
Minimum separate account	$500,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	2

American Capital Management Inc. is an equity manager.

The firm invests in smaller growth companies with accelerating earnings momentum that appear undervalued.

In fixed income, the firm tailors investments to the secular movements of inflation and interest rates, with emphasis on short- or long-term investments.

The asset mix Jan. 1 was 95% stocks and 5% cash. Luke P. LaValle Jr., president, is chief investment officer and client contact.

American Express Asset Management

375 Park Ave., New York, N.Y. 10022; (212) 415-0802

Total assets managed	$963,000,000
Tax-exempt assets managed	$74,000,000
International assets managed	$57,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	8
Size of research staff	3

American Express Asset Management is an international manager.

In equities, the firm uses valuation screens to select companies benefiting from global investment themes and that are attractively priced.

In fixed income, the firm operates from a dollar base with the freedom to hedge back into dollars, taking significant positions by currency and duration.

As of Jan. 1, the asset mix was 32% stocks and 68% bonds.

The firm is a wholly owned subsidiary of American Express Co.

Karl R. Van Horn, chairman and director, is chief investment officer. Susan Leader, director of marketing, is client contact.

American Fletcher National Bank

101 Monument Circle, Indianapolis, Ind. 46277; (317) 639-8151

Total assets managed	$5,617,000,000
Tax-exempt assets managed:	
Total	$3,740,000,000
Commingled accounts	$174,000,000
Separate accounts	$3,566,000,000
Real estate assets managed	$350,000,000
401(k) and 457 assets managed	$18,000,000
Passive assets managed	$350,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	400
Types of accounts managed	CEFGJ
No. of portfolio managers	18
Size of research staff	3

American Fletcher National Bank handles equity, fixed-income, balanced, guaranteed investment contract and indexed accounts.

Its equity approach emphasizes low p/e, sector rotation and value. Managers buy out-of-favor stocks and sell when stocks reach general investor favor. Options are used.

The active fixed-income approach uses interest rate forecasts and sector analysis. Portfolio duration is adjusted based on a cyclical perspective and is controlled with a risk-averse bias, supplemented by sector and issue selection.

It manages $350 million in dedicated or immunized portfolios.

The tax-exempt asset mix Jan. 1 was 10% stocks, 68% bonds, 8% cash, 10% mortgage-backed securities and 4% GICs.

Clients include Indiana Public Employees, Hallmark Cards, Kellogg and Texas Eastern.

Chief investment officer is Leif E. Nulsen, senior vice president. Client contact is Phillip E. Chambers, vice president and investment officer.

American Fund Advisors

50 Broad St., New York, N.Y. 10004; (212) 482-8100

Total assets managed	$176,000,000
Tax-exempt assets managed	$12,000,000
Minimum separate account	$500,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	3

American Fund Advisors Inc., an equity manager, uses Graham & Dodd analysis, seeking emerging growth stocks in two types of investment areas — technology and basic value.

It has a relatively minor focus on fixed income, concentrating on interest rate anticipation.

The asset mix Jan. 1 was 83.3% stocks, 8.6% bonds and 8.1% cash.

Clients include National Aviation & Technology Corp., National Telecommunications and Technology Fund Inc. and Continental Telecom.

Barry J. Gordon, president, is chief investment officer and client contact.

American National Bank & Trust Co. of Chicago

33 N. LaSalle St., Chicago, Ill. 60690; (312) 661-5870

Total assets managed	$9,105,000,000
Tax-exempt assets managed:	
Total	$8,160,000,000
Commingled accounts	$5,144,000,000
Separate accounts	$3,016,000,000
International assets managed	$12,000,000
401(k) and 457 assets managed	$100,000,000
Passive assets managed	$7,977,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	476
Separate	15
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	11

American National Bank & Trust Co. of Chicago handles equity, fixed-income and international accounts.

Following two separate equity approaches, the bank offers broad diversification through passive management or strategies built around contrarian ideas.

Fixed-income portfolios are passively managed.

The asset mix as of Jan. 1 was 93% stocks, 3% bonds, 2% cash and 2% international.

It had $7.2 billion in equity index funds and $800 million in bond index funds as of Jan. 1.

Three-fourths of research is generated internally, with 150 stocks followed closely and 1,000, generally.

Clients include TWA, Polaroid, Kodak and NYNEX.

John R. Tilton is chief investment officer. Client contact is Jim Kartalia, director of marketing.

AmeriTrust Co.

900 Euclid Ave., Cleveland, Ohio 44115; (216) 687-4089

Total assets managed	$10,406,000,000
Tax-exempt assets managed:	

N

ROLLERT & SULLIVAN, INC.

INVESTMENT MANAGEMENT

BOSTON
470 Atlantic Avenue
Boston, MA 02210
(617) 542-0601
(800) 343-0811

Commingled accounts	$740,000,000
Separate accounts	$4,664,000,000
Real estate assets managed	$13,000,000
401(k) and 457 assets managed	$800,000,000
Passive assets managed	$60,000,000
Minimum separate account	$3,000,000
Tax-exempt clients:	
Commingled	200
Separate	234
Types of accounts managed	CEFGJ
No. of portfolio managers	11
Size of research staff	10

AmeriTrust Co. handles equity, fixed-income, balanced, real estate and convertible securities accounts.

In equities, the bank constructs broadly diversified portfolios consisting of low p/e issues whose dividend return and fundamental value will provide superior long-term returns while limiting downside risk.

The fixed-income approach stresses quality and maturity structure so portfolios will have low volatility. Trading focuses on yield pickups where quality can be maintained.

The real estate fund provides attractive current yield plus protection against inflation. Property selections, which offer significant appreciation potential, are based on the adequacy of the current return.

The asset mix as of Jan. 1 was 65% stocks and 35% bonds.

Clients include Ameritech, GM, Bell Atlantic and Sherwin Williams.

Richard C. Hyde, executive vice president, is chief investment officer. Gary W. Queen, senior vice president, is client contact.

Amev Asset Management

1 World Trade Center, New York, N.Y. 10048; (212) 775-9100

Total assets managed	$1,350,000,000
Tax-exempt assets managed	$50,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	4
Types of accounts managed	C
No. of portfolio managers	5
Size of research staff	7

Amev Asset Management, a balanced manager, takes an asset and liability approach to equities. It uses a traditional fundamental approach emphasizing growth and value discounted to the present and compared to the current market.

It selects fixed-income securities using relative value and interest rate forecasting with either taxable or tax-exempt securities.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The firm follows 40 stocks closely and 80, generally. One-fourth of research is generated internally.

The firm is affiliated with Amev Holdings Inc.

H.C. Mackin, president, is chief investment officer. Guy G. Rutherfurd Jr., vice president and secretary, is the client contact.

Amivest Capital Management

505 Park Ave., New York, N.Y. 10022; (212) 688-6667

Total assets managed	$277,000,000
Tax-exempt assets managed	$277,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	15
Types of accounts managed	CEJ
No. of portfolio managers	3

Amivest Capital Management is an equity, fixed-income and balanced manager.

The firm relies on Graham & Dodd analysis. Its economic and investment outlook determines asset allocation.

In fixed income, the firm evaluates the various forces impacting the credit markets to determine the probable direction of interest rates.

As of Jan. 1, the asset mix was 68% stocks, 21% bonds and 13% cash.

The firm is a division of Amivest Corp.

Emmanuel Sella, president, is chief investment officer. Leonard N. Grimaldi, senior vice president, is client contact.

AmSouth Bank (Trust Division)

P.O. Box 11426, Birmingham, Ala. 35202; (205) 326-4038

Total assets managed	$4,200,000,000
Tax-exempt assets managed:	
Total	$2,098,000,000
Commingled accounts	$378,000,000
Separate accounts	$1,720,000,000
Real estate assets managed	$11,000,000
401(k) and 457 assets managed	$150,000,000
Passive assets managed	$20,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	760
Separate	285
Types of accounts managed	CEFGJ
No. of portfolio managers	13

AmSouth Bank (Trust Division) handles equity, fixed-income and balanced accounts.

Managers use a fundamental, value-oriented approach to equity management. In fixed income, managers are interest rate anticipators, working within any sponsor-prescribed risk parameters.

The tax-exempt asset mix Jan. 1 was 38% stocks, 48% bonds, 10% cash, 0.1% equity real estate, 0.4% mortgages and 3.5% miscellaneous.

It manages $20 million in dedicated or immunized portfolios.

About one-third of the research is generated internally, with 50 stocks followed closely and 170, generally.

Clients include BellSouth, Southern Services and Birmingham, Ala.

John H. Goff Jr., senior vice president and trust investment officer, is chief investment officer. Client contact is Frederick O. Newman, senior vice president and trust officer.

Analytic Investment Management Inc.

2222 Martin St., No. 230, Irvine, Calif. 92715; (714) 833-0294

Total assets managed	$1,053,000,000
Tax-exempt assets managed	$956,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	27
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	4

Analytic Investment Management Inc. is an equity and fixed-income manager.

In equities, it uses growth stock and quantitative (MPT) techniques. The firm constructs broadly diversified portfolios of common stocks and takes option positions to reduce period-to-period volatility and to increase long-term returns.

In fixed income, it employs options on a mix of Treasury bonds, notes and futures.

The asset mix Jan. 1 was 94% stocks, 3% bonds and 3% cash.

Its net gain in tax-exempt business was $108 million for the year; six tax-exempt clients were added.

The firm uses options, stock index futures and fixed-income futures.

Analytic is a wholly owned subsidiary of United Asset Management Corp.

Clients include Federal Express, Houston Municipal Employees and Vanderbilt University.

Sheen T. Kassouf, president and chairman, is chief investment officer. Ned E. Kassouf, executive vice president and treasurer, is client contact.

Anchor Capital Advisors

One Post Office Square, Boston, Mass. 02109; (617) 423-9336

Total assets managed	$75,000,000
Tax-exempt assets managed	$30,000,000
401(k) and 457 assets managed	$2,000,000
Minimum separate account	$250,000
Tax-exempt clients	25
Types of accounts managed	CEF
No. of portfolio managers	3
Size of research staff	1

Anchor Capital Advisors Inc. is a balanced manager.

In equities, it uses Graham & Dodd analysis. It strives for preservation of capital and superior returns through asset allocation and selectivity.

In fixed income, the firm is an active manager, using interest rate anticipation and fundamental research.

The asset mix Jan. 1 was 55% stocks, 40% bonds and 5% cash.

Mark V. Rickabaugh, executive vice president, is chief investment officer. William P. Rice, president, is client contact.

Andron Cechettini & Associates

3650 Mount Diablo Blvd., Suite 190, Lafayette, Calif. 94549; (415) 283-5920

Total assets managed	$85,000,000

BellSouth

Tax-exempt assets managed	$70,000,000
Minimum separate account	$500,000
Tax-exempt clients	21
Types of accounts managed	CFJ
No. of portfolio managers	3
Size of research staff	2

Andron Cechettini & Associates is an equity manager investing mainly in pre-emerging, yet rapidly growing, public companies for substantial capital appreciation.

Jan. 1 the asset mix was 85% stocks, 5% bonds and 10% cash.

Clients include W.R. Grace, Western Airlines and Bay Alarm Co.

Jonathan Andron, vice president, is chief investment officer. Ralph Cechettini, president, is client contact.

Anhalt/O'Connell Inc.

345 S. Figueroa St., Suite 303, Los Angeles, Calif. 90071; (213) 622-0066

Total assets managed	$547,000,000
Tax-exempt assets managed	$547,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	6
Types of accounts managed	CE
No. of portfolio managers	2

Anhalt/O'Connell Inc. is a fixed-income manager to whom risk control is paramount.

Interest rate trends are identified, based on supply vs. demand for credit. Portfolios then are positioned 100% in cash or U.S. Treasury notes or U.S. Treasury bonds. Options are used on Treasury bonds.

The asset mix Jan. 1 was 100% bonds.

Paul Anhalt and Michael O'Connell, principals, are managing directors and chief investment officers. Ross B. McAdam, managing director, is client contact.

Applied Portfolio Disciplines

99 Park Ave., New York, N.Y. 10016; (212) 682-5520

Total assets managed	$5,000,000
Tax-exempt assets managed	$5,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	2

Applied Portfolio Disciplines Inc., a fixed-income manager, invests in long-term U.S. Treasury bonds and improves risk/reward characteristics through the fully hedged use of options on Treasury bond futures.

The asset mix Jan. 1 was 99% bonds and 1% cash.

Beloit Corp. is the firm's client.

Robert W. Farrell, chairman, is chief investment officer. Robert P. Follert, president, is client contact.

Argus Investment Management Inc.

1200 Quail, Suite 270, Newport Beach, Calif. 92660; (714) 851-1778

Total assets managed	$140,000,000
Tax-exempt assets managed	$84,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	52
Types of accounts managed	CEF
No. of portfolio managers	5

Argus Investment Management Inc. is an equity and balanced manager.

Its equity approach is toward fundamental value, using low p/e, market timing and Graham & Dodd analysis.

In fixed income, it anticipates the trend in bond prices based on analysis of the credit and interest-rate cycles, using only government and higher-quality corporate bonds.

The asset mix Jan. 1 was 75% stocks, 5% bonds and 20% cash.

The firm is a subsidiary of Argus Research Group, New York.

Francis B. Manchester, chairman of the board, is chief investment officer. Marc Kelly, vice president and director of marketing, is client contact.

Argus Investors' Counsel

42 Broadway, New York, N.Y. 10004; (212) 425-7500

Total assets managed	$476,000,000
Tax-exempt assets managed	$417,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	11
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	25

Argus Investors' Counsel Inc. is an equity manager that buys highly diversified, large-capitalization stocks. The firm has a strong buy and sell equity discipline to keep portfolios equally weighted in its industry and common stock selections.

It invests in quality bonds in diversified, well-spaced maturities ranging from short-term to very long-term bonds. Average maturity is 14 to 18 years.

The asset mix Jan. 1 was 94% stocks, 1% bonds and 5% cash.

The firm uses options.

Clients include United Mine Workers and Margaret L. Wendt Foundation.

Herman I. Roseman, president, is the chief investment officer. Robert P. Gruesbeck, vice president, is client contact.

The firm is a subsidiary of Argus Research Group, which also owns Argus Research Corp. and Vickers Associates.

Ariel Capital Management

307 N. Michigan Ave., Chicago, Ill. 60601; (312) 726-0140

Total assets managed	$29,000,000
Tax-exempt assets managed	$26,000,000
Minimum separate account	$500,000
Tax-exempt clients	18
Types of accounts managed	CEFG
No. of portfolio managers	1
Size of research staff	1

Ariel Capital Management, an equity manager, uses low p/e and growth stock approaches.

It invests primarily in the shares of smaller to mid-sized companies that are unrecognized, misunderstood and, thus, undervalued (e.g., selling at 10 times expected earnings or less).

The asset mix Jan. 1 was 90% stocks and 10% cash.

Clients include Peoples Energy, Illinois Teachers' Retirement System and Stroh Brewery.

John W. Rogers Jr. is chief investment officer. Darice Wright is client contact.

Ariston Capital Management

12301 N.E. 10th Place, Suite 250, Bellevue, Wash. 98005; (206) 454-1600

Total assets managed	$29,000,000
Tax-exempt assets managed	$16,000,000
Minimum separate account	$100,000
Tax-exempt clients	6
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Ariston Capital Management Corp. is a balanced manager specializing in convertible securities.

Its approach combines growth and emerging growth stock, low p/e, sector rotation and long-term market forecasting. The firm uses undervalued convertibles as a low-risk alternative to the equity market.

In fixed income, it uses interest rate anticipation.

The asset mix Jan. 1 was 10% cash and 90% convertible securities.

Richard B. Russell, president, is chief investment officer. Frederick L. Denman, associate-client relations, is client contact.

Armour, Douglas Capital Management Inc.

1160 Fifth Ave., Suite 209, New York, N.Y. 10029; (212) 319-6153

Total assets managed	$13,000,000
Tax-exempt assets managed	$13,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	1
Types of accounts managed	I
No. of portfolio managers	1

Armour, Douglas Capital Management Inc. is an equity manager that invests in undervalued convertibles and equities to achieve superior total returns with less risk, lower volatility and high current income.

On Jan. 1, the asset mix was 50% stocks, 25% bonds and 25% convertibles.

The firm uses options.

St. Bartholomew's Church endowment is its client.

Peter A. Lareau, president, and Richard D. Young, chairman, are chief investment officers and client contacts.

Aronson & Fogler

1411 Walnut St., Suite 200, Philadelphia, Pa. 19102; (215)

is looking at a sunny forecast.

Over the next ten years, net migration to the Southeast will average 325,000 people a year. Total population will increase by nearly 6½ million. And there will be 4 million new jobs and 4½ million new housing starts. Creating an average growth for the region that's 25% above the national average.

That's a sunny forecast.

But an even brighter fact is that BellSouth is prepared to capitalize on this growth in its nine-state region. First, with a modern, efficient telecommunications system already in place. Second, with forward-looking strategies that provide increased customer services while generating revenues designed to go beyond those generated from regional growth alone.

The BellSouth region. It's quite a hot spot. Learn more about BellSouth from your broker. Or write: Mr. L.E. Spradlin, Director of Investor Relations, BellSouth Corporation, 675 West Peachtree Street, N.E., Atlanta, Georgia 30375. Or call 404-420-8136.

The BellSouth Companies:
South Central Bell • Southern Bell • BellSouth Services • South Central Bell Advanced Systems • Southern Bell Advanced Systems

BellSouth Enterprises • BellSouth Advertising & Publishing • Stevens Graphics • TechSouth • BellSouth Advanced Systems • BellSouth Mobility • BellSouth Systems Technology • BellSouth International • FiberLAN, Inc.

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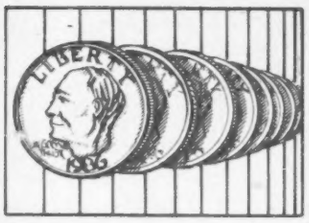


Total assets managed $50,000,000
Tax-exempt assets managed $50,000,000
Minimum separate account $10,000,000
Tax-exempt clients 4
Types of accounts managed ..... CEF
No. of portfolio managers 2

Aronson & Fogler, an equity manager, has a model-driven philosophy emphasizing growth, assets and multiples. The decision-making process is computerized and thoroughly disciplined. Portfolios deliver pure stock selection without sector or timing bets.

The asset mix Jan. 1 was 99% stocks and 1% cash.

Clients are University of Southern California, The Common Fund, Wesley Medical Endowment Foundation and BF Holding Co.

Theodore R. Aronson and H. Russell Fogler, partners, are chief investment officers. Mr. Aronson is client contact.

ASB Capital Management

655 15th St. N.W., Suite 800, Washington, D.C. 20005; (202) 383-6389

Total assets managed $4,104,000,000
Tax-exempt assets managed $3,651,000,000
Real estate assets managed $115,000,000
401(k) and 457 assets managed $10,000,000
Minimum separate account $500,000
Tax-exempt clients 311
Types of accounts managed ..... CEFGJ
No. of portfolio managers 15
Size of research staff 9

ASB Capital Management Inc. is an equity, fixed-income, balanced and real estate manager.

The firm has actively managed, diversified equity portfolios emphasizing issues with strong financials. It uses DDM discipline and sector rotation.

Its fixed-income approach is active, using interest-rate anticipation for a portfolio of highly marketable and quality bonds with emphasis on U.S. Treasury and federal agency securities.

Its real estate strategy is to invest in high-quality, income-producing properties constructed with union labor through participating and convertible mortgages and joint ventures.

The asset mix Jan. 1 was 26.4% stocks, 56.6% bonds, 10% cash and 7% equity real estate.

ASB is a wholly owned subsidiary of American Security Corp., the parent of American Security Bank.

Terence W. Collins, president, is chief investment officer. John B. Brusnighan, vice president-marketing, is the client contact.

Ashfield & Co. Inc.

303 Sacramento St., Suite 400, San Francisco, Calif., 94111; (415) 391-4747

Total assets managed $128,000,000
Tax-exempt assets managed $54,000,000
401(k) and 457 assets managed $1,000,000
Minimum separate account $500,000
Tax-exempt clients 27
Types of accounts managed ..... CEF
No. of portfolio managers 3
Size of research staff 2

Ashfield & Co. Inc. is an equity, fixed-income and balanced manager.

It concentrates on equity investments in low p/e growth companies with accelerating earnings trends and adheres to carefully established price disciplines.

Fixed-income management is active, using interest-rate anticipation.

The asset mix Jan. 1 was 35% stocks, 55% bonds and 10% cash.

J. Stephen Lauck, J. Stephen Thornborrow and W. Emer Yeager are chief investment officers. Mr. Lauck is the client contact.

25 largest investment management firms* ranked by tax-exempt assets

Rank	Managers	$ millions
1.	Batterymarch Financial Management	11,504
2.	Scudder, Stevens & Clark	10,677
3.	Delaware Investment Advisers	9,094
4.	Criterion Investment Management	8,700
5.	Miller, Anderson & Sherrerd	8,400
6.	Fayez Sarofim & Co.	8,275
7.	Wellington/Thorndike, Doran	8,257
8.	INVESCO Capital Management	7,900
9.	Oppenheimer Capital	7,790
10.	Fischer, Francis, Trees & Watts	7,500
11.	T. Rowe Price Associates	7,375
12.	First Chicago Investment Advisors	7,160
13.	Rosenberg Capital Management	6,400
14.	Boston Co.	6,156
15.	Morgan Stanley Asset Management	6,031
16.	Sanford C. Bernstein & Co.	6,000
17.	Brown Brothers Harriman & Co.	5,881
18.	Putnam Advisory	5,697
19.	Favia Hill & Associates	5,454
20.	Neuberger & Berman	5,073
21.	Leland O'Brien Rubinstein Associates	5,029
22.	BEA Associates	4,980
23.	Lincoln Capital Management	4,869
24.	Capital Supervisors	4,828
25.	Stein Roe & Farnham	4,600
	TOTAL	173,630

** Excluding bank and insurance company subsidiaries.*

Ashland Management

26 Broadway, New York, N.Y. 10004; (212) 425-2803

Total assets managed $390,000,000
Tax-exempt assets managed $234,000,000
Minimum separate account $1,000,000
Tax-exempt clients 79
Types of accounts managed ..... CEFG
No. of portfolio managers 3

Ashland Management, an equity manager, uses growth stock and low p/e approaches in its value-oriented strategy. All decisions are based on reported financial information; equity investments are substantially reduced when the market's return on equity is not competitive with risk-free investments.

The asset mix Jan. 1 was 90% stocks and 10% cash.

Clients include Memphis Light, Gas and Water; Dayton Hudson Corp.; Saga Corp.

Charles Hickox, chairman, is chief investment officer. Parry V.S. Jones, president, is client contact.

Astrop Advisory Corp.

5 Piedmont Center, Suite 417, Atlanta, Ga. 30305; (404) 239-0707

Total assets managed $175,000,000
Tax-exempt assets managed $150,000,000
Minimum separate account $1,000,000
Tax-exempt clients 24
Types of accounts managed ..... CEF
No. of portfolio managers 4
Size of research staff 2

Astrop Advisory Corp. is an equity manager emphasizing stocks of companies that have demonstrated superior sales and earnings growth and above-average returns on equity. It has a highly disciplined system to control stock and portfolio volatility.

Its fixed-income approach is passive, emphasizing maturity strategy as related to the current and anticipated level of interest rates. Intermediate-term A rated bonds are used most often.

The asset mix Jan. 1 was 85% stocks, 2% bonds and 13% cash.

Chief investment officer is William B. Astrop, chairman of the board and president. Mr. Astrop and Dixie P. Anderson, executive vice president, are client contacts.

Atalanta/Sosnoff Capital

499 Park Ave., New York, N.Y. 10022; (212) 755-2800

Total assets managed $2,701,000,000
Tax-exempt assets managed $2,638,000,000
Minimum separate account $10,000,000
Tax-exempt clients 101
Types of accounts managed ..... CEFGJ
No. of portfolio managers 5
Size of research staff 3

Atalanta/Sosnoff Capital Corp. is an equity and balanced manager.

Its equity investment decisions are based on total expected return, concentrated in only two or three sectors at one time. Emphasis is on large-capitalization issues inefficiently priced, generally with relatively low p/e ratios but with strong earnings momentum and above-average returns on equity and low price-to-book value ratios. It also looks for entrepreneurial management to advance equity-owner returns.

The firm uses interest rate anticipation in fixed income. High-quality issues are selected that optimize the duration of the fixed-income sector of the portfolio.

Stock index futures are used.

The asset mix Jan. 1 was 77% stocks, 17% bonds and 6% cash.

The firm is affiliated with broker dealer Atalanta/Sosnoff Management Corp.

Clients include Dart & Kraft, Tektronix, Levi Strauss and state of Utah.

Martin T. Sosnoff, chairman, and Shepard D. Osherow, president, are chief investment officers. Laura A. Steele, director of client service, is the client contact.

Avatar Associates

900 Third Ave., New York, N.Y. 10022; (212) 753-7710

Total assets managed $475,000,000
Tax-exempt assets managed $472,000,000
401(k) and 457 assets managed $50,000,000
Minimum separate account $5,000,000
Tax-exempt clients 68
Types of accounts managed ..... CEFG
No. of portfolio managers 3
Size of research staff 3

Avatar Associates is an equity manager that uses market timing, allocating assets between stocks and cash and rotating between growth and value stocks.

Stock index futures are used.

The asset mix Jan. 1 was 95% stocks and 5% cash.

Clients include K mart, Lear Siegler and Copperweld.

Edward S. Babbitt Jr., president and portfolio manager, and Martin E. Zweig, director of research, are chief investment officers. Bruce L. Poliquin, vice president, is client contact.

E.W. Axe & Co. Inc.

Axe Castle, 400 Benedict Ave., Tarrytown, N.Y. 10591; (914) 631-8131

Total assets managed $495,000,000
Tax-exempt assets managed $146,000,000
401(k) and 457 assets managed $8,000,000
Minimum separate account $5,000,000
Tax-exempt clients 19
Types of accounts managed ..... CFGJ
No. of portfolio managers 4
Size of research staff 6

E.W. Axe & Co. Inc. is an equity, fixed-income and balanced manager.

The equity approach uses growth stocks and emerging growth to search for unrecognized opportunities.

The fixed-income approach uses a multiscenario interest rate outlook.

The Jan. 1 tax-exempt asset mix was 63% stocks, 30% bonds and 7% cash.

In 1985, the firm suffered a $58 million net loss in tax-exempt business. One client was added.

Eighty percent of research is generated internally, with 60 stocks followed closely and 300, generally.

Clients include White Consolidated, Carolina Power & Light, Butt Grocery and Farm Credit.

The firm is a subsidiary of USF&G.

John L. Schroeder, chairman, is chief investment officer. Stephen J. Darby Jr., president, is client contact.

J.H. Ayres & Co.

2016 Condor St., Colorado Springs, Colo. 80909; (303) 635-1414

Total assets managed $1,083,000,000
Tax-exempt assets managed $1,072,000,000
Minimum separate account $500,000
Tax-exempt clients 125
Types of accounts managed ..... CE
No. of portfolio managers 2
Size of research staff 2

J.H. Ayres & Co. had all of its tax-exempt assets as of Jan. 1 in equity mutual funds.

The firm uses market timing for its investment approach. Its expertise centers on changes of Federal

CONSISTENCY

CONSISTENCY...Creates superior performance.

	ONE YEAR 12-31-85	TWO YEARS 12-31-85	THREE YEARS 12-31-85	FOUR YEARS 12-31-85	FIVE YEARS 12-31-85
KFS Fixed Income Returns	24.9%	18.7%	16.5%	21.1%	16.7%
Percentile Rank Bond Funds	14	17	2	4	14

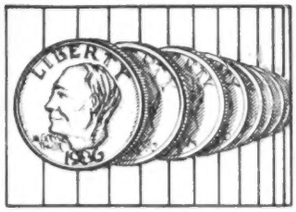
CONSISTENCY...Demands Moderate Risk

- Intermediate Maturity Structure
- Emphasis on Sector and Issue Selection
- Depth of Credit Research Expertise

Kemper Financial Services, Inc.
AN INVESTMENT ADVISOR

CONTACT: Tim Kilfoil
(312) 845-1958

Performance figures are unweighted total rates of return. Prior to 1983, the universe of accounts was a composite of the fixed income account portion of the ten largest discretionary pension and tax-exempt balanced accounts. After that, the composite was increased to include all fully discretionary fixed accounts and the fixed income account portion of balanced accounts. Comparison universe is SEI Bond Funds: Total Fund as of 12/31/85.



Reserve System monetary policy, based on the principle that an expanding economy creates a favorable climate for investmerits.

Changes in money flows precede or coincide with basic changes in stock and bond prices and business. Using this data, it alternates investments between equity mutual funds and money market mutual funds. Ayres follows about 50 mutual funds.

Clients include Viterbo College and and Looart Retirement Trust.

James H. Ayres, president, is chief investment officer and client contact.

b

BA Investment Management

555 California St., San Francisco, Calif. 94104; (415) 622-8732

Total assets managed	$12,527,000,000
Tax-exempt assets managed	$4,342,000,000
International assets managed	$12,000,000
Passive assets managed	$283,000,000
Tax-exempt clients	28
Types of accounts managed	CEFG
No. of portfolio managers	17
Size of research staff	4

BA Investment Management Corp. is an equity, fixed-income, balanced and international manager.

The firm relies on growth stock and sector rotation in its equity approach. It emphasizes value-oriented situations with above-average S&P total expected return potential with a bias toward companies exhibiting superior growth and profit characteristics.

Its fixed-income approach is based on interest rate anticipation. Defeasance, dedication, immunization and index programs also are offered.

BA Investment uses stock index and fixed-income futures.

The asset mix Jan. 1 was 60% stocks and 40% bonds.

The firm experienced a net gain of $38 million in tax-exempt assets in 1985 and gained eight tax-exempt clients.

Clients include American Motors, General Dynamics, General Motors and Morrison Knudsen.

The firm is a wholly owned subsidiary of BankAmerica Corp., which has total assets of $17.23 billion. Of that, $5.1 billion are tax-exempt.

Thomas B. Kelley is chairman and chief investment officer. Richard A. Frodsham, senior vice president, is director of marketing.

BA Investment Management International Ltd.

No. 1 Watling St., P.O. Box 262, London, England EC4P 4BX; 01-634-4664

Total assets managed	$965,000,000
Tax-exempt assets managed	$592,000,000
International assets managed	$509,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	9
Types of accounts managed	CF
No. of portfolio managers	8
Size of research staff	6

BA Investment Management International Ltd. is an international manager.

In equities, the firm emphasizes companies with improving margins, product innovation and extending existing markets or redeploying underutilized assets. They generally have relative low p/e and high yields.

In fixed income, the firm continuously reviews relative values between different market sectors, different borrowers and different areas of the yield curve, seeking to enhance yield and add value through selective swaps and adjusting portfolio duration.

The asset mix Jan. 1 was 7% stocks, 90% bonds and 3% cash.

The firm experienced a $215 million net gain in new tax-exempt business in 1985, all but $1 million in equities.

The firm is the U.K. subsidiary of BA Investment Corp., San Francisco, which is a wholly owned subsidiary of BankAmerica Corp.

Keith Brown, managing director, is chief investment officer. Francois Dennery, vice president, is client contact in the New York office. Joy Harper is client contact in the London office.

David L. Babson & Co. Inc.

One Boston Place, Boston, Mass. 02108; (617) 723-7540

Total assets managed	$2,320,000,000
Tax-exempt assets managed	$672,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	93
Types of accounts managed	CEFGJ
No. of portfolio managers	20
Size of research staff	12

David L. Babson & Co. Inc. is an equity, fixed-income and balanced manager.

The firm relies on growth stock in its equity approach. Equity portfolios are fully invested in high-quality securities with above-average growth potential. Valuation disciplines play a key role in selecting the best issues among fundamentally attractive companies.

The firm emphasizes investment-grade special-situation fixed-income securities with yields superior to other issues with similar credit quality and maturity characteristics. A fully invested, intermediate maturity policy is used.

As of Jan. 1, the asset mix was 45% stocks, 35% bonds, 5% cash and 15% equity real estate.

About 85% of the firm's research is generated internally, with 200 stocks followed closely and 650, generally.

The chief investment officer is Peter C. Thompson, president and director, chief executive officer. Robert M. Angland, vice president and director of institutional marketing, is the client contact.

Julius Baer Investment Management Inc.

330 Madison Ave., New York, N.Y. 10017; (212) 949-9055

Total assets managed	$120,000,000
Tax-exempt assets managed	$120,000,000
International assets managed	$120,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	5
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	8

Julius Baer Investment Management Inc. is an international fixed-income manager.

The firm relies on growth stock and sector rotation in its equity approach and on interest-rate anticipation and currency mix in fixed income.

The asset mix Jan. 1 was 10% stocks and 90% bonds, all invested in international markets.

The firm is a member of the Julius Baer Group, Zurich, Switzerland.

Peter J. Widmer, senior vice president, is chief investment officer. Jay A. Dimberger, managing director, is the client contact.

Bailard, Biehl & Kaiser Inc.

951 Mariner's Island Blvd., San Mateo, Calif. 94404; (415) 571-5800

Total assets managed	$480,000,000
Tax-exempt assets managed	$60,000,000
Real estate assets managed	$6,000,000
International assets managed	$13,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	18
Types of accounts managed	CF
No. of portfolio managers	5
Size of research staff	5

Bailard Biehl & Kaiser Inc. is a multiple asset manager, using stocks, bonds, international, real estate and cash investments. Using low p/e and Graham & Dodd, it seeks undervalued situations using a mix of a top-down approach, its own valuations screens and a slight contrarian leaning.

It follows interest rate anticipation for fixed income, investing in long-term bonds of AA or better when it believes interest rates will be stable or declining. It invests in equity real estate syndicated by quality managers and diversified by manager, property type and geography.

The asset mix Jan. 1 was 28% stocks, 28% bonds, 8% cash, 10% equity real estate and 26% international.

Ronald W. Kaiser, executive vice president, is the chief investment officer. Brian E. Schaefer, vice president, is the client contact.

Baillie Gifford Overseas Ltd.

2 Glenfinlas St., Edinburgh, Scotland EH3 6YY; 031-225-2581

Total assets managed	$55,000,000
Tax-exempt assets managed	$55,000,000
International assets managed	$55,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	12
Size of research staff	10

Baillie Gifford Overseas Ltd. is an international equity manager.

Equity portfolios are concentrated on growth stocks with some emphasis on medium and smaller-sized companies. In fixed income, it relies on interest rate anticipation and sector analysis.

As of Jan. 1, the asset mix was 100% in stocks. The firm uses options.

The firm is wholly owned by Baillie Gifford & Co., which has total assets of $1.5 billion. Of that, $475 million are tax-exempt assets.

Gavin J.N. Gemmell, chairman, is chief investment officer. Peter J. Murray, marketing executive-pensions, is the client contact.

Balch, Hardy & Scheinman

501 Fifth Ave., New York, N.Y. 10017; (212) 661-6290

Total assets managed	$1,044,000,000
Tax-exempt assets managed	$1,044,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	15
Types of accounts managed	CFGJ
No. of portfolio managers	4
Size of research staff	1

Balch, Hardy & Scheinman Inc., an options overrider, had 95% of its tax-exempt assets in stocks and 5% in cash as of Jan. 1.

The firm gained eight tax-exempt clients in 1985 and experienced a net gain in tax-exempt assets of $155 million.

Half of its research is generated in-house.

Clients include the city of Baltimore, Army and Air Force Exchange, city of Houston Firemen and San Bernardino (Calif.) County.

William F. Balch, president, is chief investment officer and client contact.

The Bank of California

400 California St., San Francisco, Calif. 94104; (415) 765-0400

Total assets managed	$2,200,000,000
Tax-exempt assets managed:	
Total	$239,000,000
Commingled accounts	$48,000,000
Separate accounts	$191,000,000
401(k) and 457 assets managed	$19,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	40
Separate	16
Types of accounts managed	CEFJ
No. of portfolio managers	17
Size of research staff	6

The Bank of California is an equity, fixed-income and balanced manager.

In equities, the bank provides a spectrum of disciplined strategies. A major portion of managed funds use a strategy based on historical relative yield ranges.

Fixed-income portfolios are actively managed using above-average quality securities based on interest rate forecasts derived from economic multi-scenario probabilities.

The Jan. 1 tax-exempt asset mix was 48% stocks, 36% bonds and 16% cash.

Kenneth J. Kaplan, vice president, senior investment officer and manager is chief investment officer. Scott D. Merritt, vice president, is client contact.

Bank of Delaware

300 Delaware Ave., Wilmington, Del. 19711; (302) 429-1547

Total assets managed	$960,000,000
Tax-exempt assets managed:	
Total	$180,000,000
Commingled accounts	$22,000,000
Separate accounts	$158,000,000
Real estate assets managed	$3,000,000
International assets managed	$3,000,000
401(k) and 457 assets managed	$2,000,000
Passive assets managed	$8,000,000
Tax-exempt clients:	
Commingled	41
Separate	66
Types of accounts managed	CEFJ
No. of portfolio managers	7
Size of research staff	4

Bank of Delaware is an equity, fixed-income and balanced manager.

Using a sector rotation approach to equities, its universe is divided into four subsets based on a multistage screening process. Valuation functions and sensitivity analysis determine stock selection.

The fixed-income policy is determined by analysis of the interest rate cycle position vs. the economic cycle and shape of the yield curve.

The Jan. 1 tax-exempt asset mix was 38% stocks, 55% bonds, 2% cash, 4% equity real estate, 0.5% mortgages and 0.5% mortgage-backed securities.

It manages about $7.5 million in dedicated or immunized portfolios.

The bank is affiliated with Del-Vest Inc.

Edgar B. Loring, vice president, is chief investment officer. James W. Whalen Jr., senior corporate trust officer, is client contact.

BankEast Trust Co.

2 Wall St., Manchester, N.H. 03105; (603) 644-4305

Total assets managed	$240,000,000
Tax-exempt assets managed:	
Total	$50,000,000
Separate accounts	$50,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	27
Types of accounts managed	CEFGJ
No. of portfolio managers	2
Size of research staff	1

BankEast Trust Co. handles equity, fixed-income and balanced accounts.

The bottom-up, strictly fundamental

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"Performance"—everyone wants it, no one can guarantee it. But our syndication and portfolio management division, Consolidated Capital, offers an excellent track record.

As a leading sponsor and advisor of real estate investment programs, Consolidated Capital measures its success not only in capital dollars raised, but also by the returns provided to its investors. We're proud to report that of the $2.1 billion in capital raised by Consolidated Capital, $942 million has been returned—a record far exceeding industry standards. Over the past fifteen years, we've sold more than 200 of the properties we had acquired for our investors, and over the same time period, the annual appreciation of those properties outpaced inflation and the Standard and Poor's 500 Index.

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JOHNSTOWN AMERICAN COMPANIES

5775-A Peachtree Dunwoody Rd., Atlanta, GA 30342

An American Stock Exchange Company (JAC)

reasonable income and appreciation. Managers move in and out of cash when prudent in listed securities with proven track records.

In fixed income, managers capitalize on market disparities with conservative portfolios based on interest rate anticipation using sector, coupon and quality investments (A rating minimum), considering historical spread data in 15 to 20 issues.

The asset mix Jan. 1 was 65% stocks and 35% bonds.

Chief investment officer is David L. Carlson, senior vice president-investments. Client contact is John M. McNamara, vice president.

Bankers Life Co.

711 High St., Des Moines, Iowa 50307; (515) 247-5041

Total assets managed	$14,926,000,000
Tax-exempt assets managed:	
Total	$10,753,000,000
Pooled accounts	$1,832,000,000
Real estate assets managed	$91,000,000
401(k) and 457 assets managed	$700,000,000
GICs	$2,300,000,000
Annuities	$463,000,000
Other	$6,158,000,000
Minimum separate account	$10,000,000
Types of accounts managed	CGJ
No. of portfolio managers	8
Size of research staff	52

Bankers Life Co., a member of the Principal Financial Group, offers equity, fixed-income, balanced and real estate capabilities.

In equities, managers take a top-down, value-oriented approach, determined by relating current price to estimated future return on net worth.

The fundamental fixed-income approach uses both public and private markets, focusing on interest rates, credit risk, maturities and terms.

In real estate, the company invests in newly constructed, fully-leased buildings of less than $15 million. Managers emphasize low leverage with national diversification.

The tax-exempt asset mix Jan. 1 was 71% stocks, 19% cash, 2% equity real estate, 2% mortgages and 6% private placements.

Clients include American Motors, Federal-Mogul, Lubrizol and Meredith Publishing.

Value Investors Inc. is a subsidiary.

Roy Ehrle, senior vice president, is chief investment officer. Client contact is F. Doug Rasmussen, director of pension investment services.

Bankers Trust — Investment Management Group

280 Park Ave., New York, N.Y. 10015; (212) 850-2050

Total assets managed	$41,810,000,000
Tax-exempt assets managed	$41,810,000,000
International assets managed	$78,000,000
401(k) and 457 assets managed	$2,251,000,000
Passive assets managed	$21,440,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	129
Types of accounts managed	CFGJ
No. of portfolio managers	40
Size of research staff	19

Bankers Trust — Investment Management Group has equity, fixed-income, balanced and international capabilities, and offers a variety of non-traditional investment services such as index funds, futures and options.

It uses passive, growth stock and MPT approaches to equity and offers core equity (relative value, bottom-up), small-cap growth and controlled risk products.

In fixed income, the firm believes yield is crucial to total return and that returns can be enhanced significantly through sector and issue selection.

The tax-exempt asset mix Jan. 1 was 56.1% stocks, 16.7% bonds, 22.8% cash, 1.1% mortgages and 3.3% commingled funds.

The net gain in new tax-exempt business during 1985 was $2.16 billion. Seventy-five tax-exempt clients were added.

The firm is a subsidiary of Bankers Trust Co., which manages $46.86 billion in total assets, of which $41.81 billion are tax-exempt.

Clients include Mobil, General Motors, AT&T and Times-Mirror.

H. Kent Atkins, managing director, is the chief investment officer. Louis R. Rowan, marketing director, is the client contact.

Bank IV Wichita

100 N. Broadway, P.O. Box 4, Wichita, Kan. 67201; (316) 261-4563

Total assets managed	$822,000,000
Tax-exempt assets managed:	
Total	$469,000,000
Commingled accounts	$35,000,000
Separate accounts	$434,000,000
Real estate assets managed	$38,000,000
401(k) and 457 assets managed	$29,000,000
Tax-exempt clients:	
Commingled	197
Separate	250
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	2

Bank IV Wichita is an equity, fixed-income and balanced manager.

Its equity approach focuses on the construction of diversified portfolios that highlight economically favored market sectors. Individual stocks are selected through fundamental value comparisons derived from a dividend discount model.

Fixed-income portfolios are actively managed based upon interest rate forecasts and relative values in attractive market sectors.

The Jan. 1 tax-exempt asset mix was 33% stocks, 42% bonds, 12% cash, 0.4% equity real estate, 0.1% mortgages, 8% mortgage-backed securities and 4.5% miscellaneous.

The bank is a subsidiary of Fourth Financial Corp.

David L. Strohm, executive vice president-funds management division, is chief investment officer. Gary E. Hippenstiel, vice president and manager-securities management department, is client contact.

The Bank of New York

48 Wall St., New York, N.Y. 10015; (212) 530-1784

Total assets managed	$2,200,000,000
Tax-exempt assets managed:	
Total	$2,200,000,000
Commingled accounts	$147,000,000
Separate accounts	$2,053,000,000
Real estate assets managed	$100,000,000
Passive assets managed	$40,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	3
Separate	83
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	10

The Bank of New York offers equity, fixed-income, balanced, international and options accounts.

Its equity approach uses growth stock and sector rotation strategies.

The fixed-income approach is based on interest rate anticipation and sector exposure. Cash reserves and coupons are adjusted in actively managed portfolios. Options and stock index futures are used.

The Jan. 1 tax-exempt asset mix was 60% stocks and 40% bonds.

The bank managed $40 million in bond index funds.

Managers follow 30 to 50 stocks closely and 200, generally; 80% of research is generated internally.

Clients include Sherman Fairchild and Indiana State Teachers.

Charles L. Booth, executive vice president, is chief investment officer. Thomas C. Lincoln, vice president, is client contact.

Bank of Oklahoma, Tulsa

P.O. Box 2300, Tulsa, Okla. 74192; (918) 588-6448

Total assets managed	$2,500,000,000
Tax-exempt assets managed:	
Total	$2,072,000,000
Commingled accounts	$109,000,000
Separate accounts	$1,963,000,000
Real estate assets managed	$5,000,000
401(k) and 457 assets managed	$400,000,000
Passive assets managed	$45,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	130
Separate	446
Types of accounts managed	CEFG
No. of portfolio managers	5

Bank of Oklahoma, Tulsa, is an equity, fixed-income and balanced manager with additional capabilities in hedged equity and managed guaranteed investment contract accounts.

In equities, managers use a value-oriented approach with an emphasis on earnings and dividend growth.

The fixed-income approach seeks to maximize return at an average maturity corresponding to the client's degree of risk.

25 largest banks and trust companies* ranked by tax-exempt assets

Rank	Managers	$ millions
1.	Bankers Trust	41,810
2.	J.P. Morgan	38,866
3.	Wells Fargo Investment Advisors	29,520
4.	Mellon Bank	21,163
5.	Manufacturers Hanover Investment	18,383
6.	Citicorp Investment Management	17,938
7.	Chase Investors Management	15,000
8.	Capital Guardian Trust	12,883
9.	State Street Bank & Trust	12,252
10.	Wilmington Trust	10,000
11.	Trust Company of the West	8,903
12.	Fiduciary Trust Co. of New York	8,823
13.	Harris Trust and Savings Bank	8,400
14.	American National Bank & Trust, Chicago	8,160
15.	Northern Trust	7,571
16.	National Bank of Detroit	5,703
17.	AmeriTrust	5,404
18.	RepublicBank, Dallas	5,337
19.	Boatmen's National Bank	4,500
20.	Security Pacific Investment Managers	4,345
21.	BA Investment Management	4,342
22.	American Fletcher National Bank	3,740
23.	Centerre Trust Co. of St. Louis	3,657
24.	ASB Capital Management	3,651
25.	Irving Trust	3,400
	TOTAL	303,751

** includes subsidiaries*

The Jan. 1 tax-exempt asset mix was 18% stocks, 54% bonds and 28% cash.

The bank had $45 million in dedicated or immunized portfolios.

Managers follow 100 stocks closely and 100, generally.

Clients include Cities Service, Oklahoma Public Employees, Facet Enterprises and MAPCO.

Ned Schmidt, senior vice president, is chief investment officer. James W. Morris, vice president and trust officer, is client contact.

The Bank of Tokyo Trust Co.

100 Broadway, Trust Department, New York, N.Y. 10005; (212) 766-8494

Total assets managed	$102,000,000
Tax-exempt assets managed:	
Total	$56,000,000
Commingled accounts	$34,000,000
Separate accounts	$22,000,000
International assets managed	$2,000,000
401(k) and 457 assets managed	$7,000,000
Tax-exempt clients:	
Commingled	58
Separate	6
Types of accounts managed	CF
No. of portfolio managers	3
Size of research staff	2

The Bank of Tokyo Trust Co. is an equity, fixed-income and international manager.

The equity approach uses market timing. The fixed-income approach uses interest rate forecasts. Wide swings are made in asset allocation decisions between cash and bonds.

The Jan. 1 tax-exempt asset mix was 40% stocks, 42% bonds and 18% cash.

Clients include Nikon, TDK, Maxell and Stanley Electric.

Charles E. Ryan, vice president, is chief investment officer. Dennis Demetropoulos, assistant vice president, is client contact.

Bank of the West

P.O. Box 1121, San Jose, Calif. 95108; (408) 998-6857

Total assets managed	$90,000,000
Tax-exempt assets managed:	
Total	$7,000,000
Commingled accounts	$3,000,000
Separate accounts	$4,000,000
Types of accounts managed	CFG
No. of portfolio managers	1

Bank of the West handles equity, fixed-income and balanced accounts.

Managers stress solid fundamentals, strong balance sheets, dominant factor, good unit growth, pricing flexibility and low to medium p/es in equities.

In fixed income, managers generally invest no longer than five to 10 years in issues A+ or better.

The tax-exempt asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

Joseph W. Hefner, vice president, is chief investment officer. Client contact is Donald L. Draper, senior vice president.

Baring International Investment Ltd.

66 Long Wharf, Boston, Mass. 02110; (617) 357-9074

Total assets managed	$819,000,000
Tax-exempt assets managed	$819,000,000
International assets managed	$819,000,000
Tax-exempt clients	14
Types of accounts managed	C
No. of portfolio managers	7
Size of research staff	8

Baring International Investment Ltd., an international manager, uses growth stock and low p/e approaches to equities. It stresses active movement among markets, taking a top-down approach to market selection and a bottom-up approach to stock selection.

For fixed income, the firm seeks to add value through currency selection, maturity mix within currencies and sector allocation. Securities must be AA or better; quantitative analysis is emphasized.

The asset mix Jan. 1 was 73% stocks, 22% bonds and 5% cash.

During 1986, net gain in new tax-exempt business was $182 million. Two tax-exempt clients were added.

Its parent company is Baring Brothers, which has total assets of $8 billion and tax-exempt assets of $6 billion.

Peter S. Hartley, managing director, is the chief investment officer. John F. McNamara, director, is client contact.

Weaver C. Barksdale & Associates

5050 Thoroughbred Lane, Brentwood, Tenn. 37027; (615) 373-1155

Total assets managed	$443,000,000
Tax-exempt assets managed	$443,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	13
Types of accounts managed	CEGJ
No. of portfolio managers	2
Size of research staff	2

Weaver C. Barksdale & Associates, a fixed-income adviser, manages the duration of fixed-income portfolios based on its assessment of future interest rate trends, using a proprietary investment approach. Options are used.

All assets were in bonds Jan. 1.

The firm experienced a net gain in tax-exempt assets in 1985 of $15.5 million.

About 80% of the firm's research is generated in-house.

Clients include the Major League Baseball Players Association, Joy Manufacturing and the TVA.

Weaver C. Barksdale, president, is chief investment officer. John E. McDowell, senior vice president, is client contact.

Barnett Banks Trust Co.

801 Riverside Ave., P.O. Box 40200, Jacksonville, Fla. 32231; (904) 798-1738

Total assets managed	$2,500,000,000
Tax-exempt assets managed:	
Total	$500,000,000
Commingled accounts	$35,000,000
Separate accounts	$465,000,000
Real estate assets managed	$3,000,000
International assets managed	$3,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	180
Separate	200
Types of accounts managed	CEFG
No. of portfolio managers	16
Size of research staff	5

Barnett Banks Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach uses a series of quantitative models to select stocks that are above average in quality and relatively undervalued. Industry and factor concentrations are controlled to limit risk exposure.

Fixed-income management is conducted on a total return basis using sector swaps, rate anticipation and risk-reward simulation analysis.

Options, stock index futures and fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 50% stocks, 48% bonds and 2% cash.

Clients include Barnett Banks of Florida, Publix Supermarkets and Tampa Electric.

Charles H. Montford, senior vice president and senior investment officer, is chief investment officer. Timothy McFall, senior vice president, is client contact.

Barrow, Hanley, Mewhinney & Strauss Inc.

200 Crescent Court, 19th Floor, Dallas, Texas 75201; (214) 871-5300

Total assets managed	$3,124,000,000
Tax-exempt assets managed	$3,109,000,000
Tax-exempt clients	49
Types of accounts managed	CEF
No. of portfolio managers	6

Barrow, Hanley, Mewhinney & Strauss Inc. offers equity, balanced and fixed-income capabilities.

For equities, the firm focuses on low p/e and high yield. Stressing sector analysis in fixed income, the portfolios have a structural advantage vs. the market, regardless of whether interest rates rise or fall. Additional value is added through investing in undervalued securities, providing a high yield to maturity.

Minimum account size for separate management is $3 million for fixed income and $20 million for equities.

The tax-exempt asset mix Jan. 1 was 90% stocks, 4% bonds, 5% cash and 1% mortgage-backed securities.

The firm netted $439.7 million in new tax-exempt business in 1985; 10 clients were added.

About half of the research is generated internally, with 200 stocks followed closely and 750, generally.

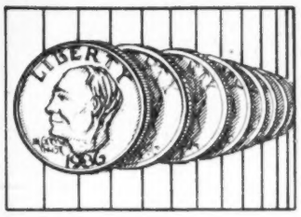
Clients include the Commonwealth of Pennsylvania, GM, Olin and Phillips Petroleum.

Client contacts are Michael C. Mewhinney for equities and Peter F. Bridge for fixed income.

Bartlett & Co.

120 E. Fourth St., Cincinnati, Ohio 45202; (513) 621-4612

Total assets managed	$701,000,000
Tax-exempt assets managed	$160,000,000
Real estate assets managed	$3,000,000
International assets managed	$5,000,000
Minimum separate account	$500,000
Tax-exempt clients	150
Types of accounts managed	CEF
No. of portfolio managers	15
Size of research staff	3



Bartlett & Co. is an equity and balanced manager.

Following Graham & Dodd principles, the firm uses a value-oriented investment approach emphasizing low p/e, high asset values and strong financial positions.

Sector analysis is used in fixed-income management.

The asset mix Jan. 1 was 65% stocks, 25% bonds and 10% cash.

The firm netted $15 million in new tax-exempt business in 1985; 15 clients were added.

Eighty percent of the research is generated internally, with 75 stocks watched closely and 200, generally.

William A. Friedlander is chief investment officer. Client contact is Woodrow H. Uible.

Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass. 02210; (617) 973-9300

Total assets managed	$11,905,000,000
Tax-exempt assets managed	$11,504,000,000
International assets managed	$909,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	135
Types of accounts managed	CEFGJ
No. of portfolio managers	11

Batterymarch Financial Management is an equity manager that takes a contrary, value-oriented approach, preferring unpopular or cheap stocks.

As of Jan. 1, the tax-exempt asset mix was 99% stocks and 1% cash.

The firm added seven tax-exempt clients in 1985 and experienced a net loss in tax-exempt assets of $945 million.

The firm generates 95% of its research in-house, with 2,000 stocks followed closely and 6,000, generally.

Clients include the State of California, United Mine Workers, General Motors and the Mellon Foundation.

Dean LeBaron, trustee, is chief investment officer. Alan J. Strassman, trustee, is client contact.

Baxter & Hoops Inc.

1166 South Town Merchants Plaza, Indianapolis, Ind. 46204; (317) 635-7119

Total assets managed	$436,000,000
Tax-exempt assets managed	$135,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	4
Types of accounts managed	CG
No. of portfolio managers	3

Baxter & Hoops Inc. is a fixed-income manager that relies on interest rate anticipation in its approach. Fixed-income futures are used.

The asset mix Jan. 1 was 50% bonds and 50% cash.

Gary L. Baxter and Norman E. Hoops are the chief investment officers and client contacts.

BBL Capital Management

60 Cours Saint-Michel, Brussels, Belgium 1040; (011) 32-2-738-21-67

Total assets managed	$465,000,000
Tax-exempt assets managed	$436,000,000
Minimum separate account	$4,000,000
Tax-exempt clients	41
Types of accounts managed	CF
No. of portfolio managers	4
Size of research staff	20

BBL Capital Management Corp. is a balanced and international manager.

Combining Graham & Dodd, sector rotation, low p/e, quantitative and market-timing techniques in its equity approach, the firm aims at picking companies with substantial cash flows that are selling at a discount.

In fixed income, it anticipates interest rates, constantly diversifying the portfolio and trying to leverage it through well-timed purchases of deep discount bonds.

The asset mix Jan. 1 was 27% stocks, 62% bonds, 5% cash, 3% real estate bearer certificates and 3% mutual funds.

The parent company is Banque Bruxelles Lambert, Brussels, with assets of more than $4 billion, of which $436 million is tax-exempt.

Philippe Desirant, manager, is chief investment officer. Client contact is Georges Dunesmo, managing director.

BEA Associates Inc.

One Citicorp Center, 153 E. 53rd St., New York, N.Y. 10022; (212) 832-2626

Total assets managed	$5,230,000,000
Tax-exempt assets managed	$4,980,000,000
International assets managed	$262,000,000
Passive assets managed	$439,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	161
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	5

BEA Associates Inc., a balanced manager, employs a value orientation approach to equities, seeking situations where it disagrees with the consensus estimates of cash flows and discount rates.

It structures fixed-income portfolios to resemble a client-specified benchmark, adding value through individual issue selection, sector selection and swapping.

The tax-exempt asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

During 1985, the firm had a net loss of $69 million in tax-exempt assets; 13 tax-exempt clients were added.

BEA uses options, stock index futures and fixed income futures. Ten percent of its research is generated internally.

Clients include state of Oregon, New York State Teachers, General Public Utilities and General Foods.

Albert Zesiger, president and chairman, is the chief investment officer. John Hurford, managing director, is the client contact.

Bear Stearns Asset Management

55 Water St., New York, N.Y. 10041; (212) 952-5981

Total assets managed	$1,302,000,000
Tax-exempt assets managed	$1,002,000,000
401(k) and 457 assets managed	$30,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	45
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	1

Bear Stearns Asset Management is an equity, fixed-income and balanced manager.

In equities, the value-oriented manager uses a set of proprietary equity screens to isolate companies with strong, fundamental characteristics whose prices are below market or industry levels. Qualitative thinking is then applied to identify stocks with strong upside potential.

In fixed income, the firm is a conservative manager that invests primarily in U.S. government securities and adjusts a portfolio's average maturity according to interest rate trends.

The asset mix Jan. 1 was 52% stocks and 48% bonds.

The firm gained 16 tax-exempt clients in 1985 and experienced a net gain of $493 million in new tax-exempt business.

Clients include Automatic Data Processing Inc., Archdiocese of New York, Commonwealth of Massachusetts and Capital Cities/ABC.

The firm is a wholly owned subsidiary of Bear, Stearns & Co.

Peter N. Marron is chief investment officer. John F. Boneparth, director of marketing, is client contact.

P.E. Becker Inc.

2185 Pacwest Center, Portland, Ore. 97204; (503) 223-1720

Total assets managed	$186,000,000
Tax-exempt assets managed	$96,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	50
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	1

P.E. Becker, a balanced manager, uses a low p/e approach to equity. It begins with strong fundamental research zeroing in on sound companies valued at a reasonable price. Buying at the right price minimizes risk and is an added sell discipline.

It engages in active bond management using sector analysis. The market is searched for the best value at a given time relative to risk.

The tax-exempt asset mix Jan. 1 was 55% stocks, 30% bonds and 15% cash.

Patrick E. Becker, president, is chief investment officer and client contact.

Beese Fulmer & Pincoe Inc.

418 AmeriTrust Bldg., 116 Cleveland Ave. N., Canton, Ohio 44702; (216) 454-6555

Total assets managed	$78,000,000
Tax-exempt assets managed	$16,000,000
International assets managed	$1,500,000
Minimum separate account	$1,000,000
Tax-exempt clients	8
Types of accounts managed	CF
No. of portfolio managers	2

Beese Fulmer & Pincoe Inc., a balanced manager, uses low p/e and growth stock approaches, focusing primarily on fundamental valuation with earnings growth and market price sensitivities. Interest rate anticipation is the basis for its fixed-income approach.

The tax-exempt asset mix Jan. 1 was 60% stocks, 35% bonds and 5% cash. Its net gain in new tax-exempt business for 1985 was $5 million; one tax-exempt client was added.

Dennis S. Fulmer, chairman, is chief investment officer. William A. Pincoe, president, is client contact.

Sanford C. Bernstein & Co.

767 Fifth Ave., New York, N.Y. 10153; (212) 486-5870

Total assets managed	$7,300,000,000
Tax-exempt assets managed	$6,000,000,000
Minimum separate account	$200,000
Tax-exempt clients	1,022
Types of accounts managed	CEFGJ
No. of portfolio managers	18
Size of research staff	32

Sanford C. Bernstein & Co. Inc. is an equity, fixed-income and balanced manager.

In equities, the firm is a value-oriented manager that seeks to uncover extreme mispricings. It uses security analysis and a disciplined decision-making process. Value is defined by the relationship of price to long-term earnings and dividends. Low p/e, sector rotation and Graham & Dodd influence the approach.

In fixed income, the firm is a value-oriented, intermediate-term bond manager. Quantitatively based research evaluates relationships between and within sectors and along the yield curve, and values the components of a bond. A disciplined decision-making process is used to buy and sell securities; sector analysis is emphasized. Fixed-income futures are used.

The asset mix Jan. 1 was 83% stocks, 15% bonds and 2% cash.

The firm had a net gain of $1.009 billion in new tax-exempt business in 1985. Sixty-nine tax-exempt clients were added.

Peter Carman is chairman of the investment policy committee and chief investment officer. Richard S. Abramson, director-pension asset advisers, is client contact.

Bernstein-Macaulay Inc.

410 Park Ave., New York, N.Y. 10022; (212) 906-2900

Total assets managed	$2,309,000,000
Tax-exempt assets managed	$2,140,000,000
401(k) and 457 assets managed	$8,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	59
Types of accounts managed	CEFGJ
No. of portfolio managers	12
Size of research staff	1

Bernstein-Macaulay Inc. offers equity, fixed-income, balanced and mutual fund capabilities.

Its top-down equity approach emphasizes active asset allocation and identification of sector or stock sensitivity to economic conditions. A bottom-up analysis of company fundamentals is used to check for value.

Its fixed-income approach combines measured duration adjustments with changes in sector emphasis. Interest rate forecasting and continuous economic and sector analysis are crucial.

The tax-exempt asset mix Jan. 1 was 41% stocks, 30% bonds, 11% cash, 17% mortgage-backed securities and 1% in its emerging growth trust.

The $363.8 million in mortgage-backed securities was invested in pooled funds of the securities.

It uses options and fixed-income futures.

In 1985, four tax-exempt clients were added. The firm is a wholly owned subsidiary of Shearson Lehman Brothers Inc. Total assets managed by the parent company and all subsidiaries is $42 billion.

Joel R. Swanson is president and chief investment officer. John P. Arnold, vice president and director of marketing, is the client contact.

Berry Hartell & Evers

550 Kearny St., Suite 510, San Francisco, Calif. 94108; (415) 362-5637

Total assets managed	$200,000,000
Tax-exempt assets managed	$23,000,000
401(k) and 457 assets managed	$3,000,000
Minimum separate account	$500,000
Tax-exempt clients	11
Types of accounts managed	CEF
No. of portfolio managers	4

Berry Hartell & Evers is a balanced manager that relies on growth stock in its equity approach and on interest rate anticipation in its approach to fixed income. The firm uses options.

The tax-exempt asset mix Jan. 1 was 55% stocks, 35% bonds and 10% cash.

The firm gained five tax-exempt clients in 1985, with a net gain of $7 million in new tax-exempt business.

Half of the research is generated internally; 75 stocks are followed closely and 300, generally.

Kenneth Berry is chief investment officer. The client contact is Charles Osborne.

Bessemer Trust Co.

630 Fifth Ave., New York, N.Y. 10111; (212) 708-9100

Total assets managed	$4,282,000,000
Tax-exempt assets managed	$554,000,000
Real estate assets managed	$22,000,000
International assets managed	$46,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	62
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	7

Bessemer Trust Co. is an equity, fixed-income, balanced, real estate and international manager.

Its equity style is flexible and is based upon careful analysis of market cycles and themes. Options are used.

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An investment option that you should consider for your company's 401(k) plan is *Bessemer Active Balanced Fund Management.* While your plan may have equity, fixed income and GIC options, many employees may prefer to delegate the asset allocation decision to an Advisor skilled in the active management of a portfolio consisting of stocks, bonds and short-term reserves.

A composite of discretionary balanced institutional funds under our management has ranked in the *top 6%* of balanced funds measured by SEI Corporation over the last seven years.

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For more information, please call or write Robert C. Elliott, Senior Executive Vice President, Bessemer Trust Company, N.A., 630 Fifth Avenue, New York, NY 10111, (212) 708-9141.

Bessemer Trust

Affiliated with Bessemer Trust Company, New Jersey and Bessemer Trust Company of Florida

Its fixed-income approach uses interest rate forecasts to adjust the duration of portfolios. Sector emphasis depends on the stage of the economic cycle and analysis of historical yield relationships and credits.

The asset mix Jan. 1 was 46% stocks, 35% bonds, 13% cash, 4% equity real estate and 2% oil and gas.

Clients include Windham Foundation, New York State Bankers Retirement System and New York State Electric and Gas Retirement.

John R. Whitmore, president and chief executive officer, is chief investment officer. Robert C. Elliott, senior executive vice president, is client contact.

Beutel, Goodman & Co. Ltd.

2300 Yonge St., Suite 1201, Toronto, Ontario M4P 1E4; (416) 485-1010

Total assets managed	$3,800,000,000(U.S.)
Tax-exempt assets managed:	
Total	$3,300,000,000
For subsidiaries of U.S. firms	$700,000,000
Real estate assets managed	$150,000,000
Minimum separate account	$10,000,000
Tax-exempt clients:	
Total	72
U.S. subsidiaries	22
Types of accounts managed	CEFPU
No. of portfolio managers	7
Size of research staff	4

Canadian manager Beutel Goodman & Co. Ltd. handles equity, fixed-income, balanced and real estate accounts.

The firm uses an equity philosophy based on sector rotation and Graham & Dodd analysis. Its contrarian and value-oriented approach seeks to accumulate deeply undervalued equities that are at a discount to intrinsic value at a low multiple of earnings.

The fixed-income approach uses interest rate anticipation. There is an emphasis on liquidity, quality and income stream. Total returns are augmented through active management that exploits both anomalies in yield curve relationships and deviations from the expected trend in rates.

In real estate, the firm operates closed-end diversified pools of commercial real estate. The emphasis is on acquiring properties that can be upgraded to augment cash returns.

The asset mix Jan. 1 was 42% Canadian stocks, 18% bonds, 10% cash, 4% equity real estate, 25% U.S. stocks and 1% venture capital.

Austin C. Beutel, president, is chief investment officer. David A. Williams, vice president, is client contact.

Bissett & Associates Investment Management

No. 750, 205 Fifth Ave. S.W., Calgary, Alberta T2P 2V7; (403) 266-4664

Total assets managed	$262,000,000(U.S.)
Tax-exempt assets managed	$70,000,000
International assets managed	$18,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	10
Types of accounts managed	CF
No. of portfolio managers	4

Bissett & Associates, a Canadian firm, is a balanced manager.

In equities, it considers itself a fundamentalist, long-term investor that looks for full diversification. It maintains laddered fixed-income portfolios appropriate to client liabilities, but use active management to improve returns.

As of Jan. 1, the asset mix was 23% Canadian stocks, 48% bonds, 1% cash, 6% U.S. stocks and 22% money market funds.

Clients include Sovereign Life and British Columbia Auto Association.

David A. Bissett, president, is chief investment officer and client contact.

Black, Galper & Heessels

Suite 1010, P.O. Box 413, 2 First Canadian Place, Toronto, Ontario M5X 1E3; (416) 869-0161

Total assets managed	$1,550,000,000(U.S.)
Tax-exempt assets managed:	
Total	$1,533,000,000
For subsidiaries of U.S. firms	$391,000,000
International assets managed	$150,000,000
Minimum separate account	$20,000,000
Tax-exempt clients:	
Total	47
U.S. subsidiaries	11
Types of accounts managed	CEFU
No. of portfolio managers	6

Black, Galper & Heessels Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach focuses on low p/e, sector rotation and market timing. In fixed-income, the firm uses interest rate anticipation.

Jan. 1, the asset mix was 40% Canadian stocks, 25% bonds, 25% cash and 10% U.S. stocks.

Half of its research is generated in-house, with 80 stocks followed closely and 150 followed generally.

Paul F. Black, president, is chief investment officer and client contact.

William Blair & Co.

135 S. LaSalle St., Chicago, Ill. 60603; (312) 236-1600

Total assets managed	$1,359,000,000
Tax-exempt assets managed	$615,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEF
No. of portfolio managers	12
Size of research staff	14

William Blair & Co. is an equity and balanced manager.

The firm relies on emerging growth in its equity approach and builds portfolios with small, medium and large growth companies varied by relative value and client risk tolerance.

It takes a passive approach to fixed income.

The asset mix Jan. 1 was 68% stocks, 18% bonds and 14% cash.

Four tax-exempt clients were gained during 1985, with a net gain in tax-exempt business of $40 million.

Three-fourths of the research is generated internally; 274 stocks are followed closely.

Conrad Fischer, partner, is chief investment officer. Client contact is Richard C. Taylor.

Arnhold & S. Bleichroeder International

45 Broadway, New York, N.Y. 10006; (212) 943-9200

Total assets managed	$135,000,000
Tax-exempt assets managed	$91,000,000
International assets managed	$91,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	4
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	12

Arnhold & S. Bleichroeder is an international equities manager using fundamental evaluation in their aggressive, bottom-up approach to security selection.

The Jan. 1 tax-exempt asset mix was 95% stocks and 5% cash.

Clients include Allied-Signal and N.L. Industries.

The firm is a division of Arnhold & S. Bleichroeder Inc.

Howard B. Moss, senior vice president, is chief investment officer. Frederic C. Reynolds is client contact.

BMI Capital Corp.

67 Wall St., New York, N.Y. 10005; (212) 422-1603

Total assets managed	$325,000,000
Tax-exempt assets managed	$260,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	14
Types of accounts managed	CG
No. of portfolio managers	2
Size of research staff	7

BMI Capital Corp., an equity manager, uses growth stock, emerging growth and low p/e approaches.

Using independent research and focusing outside the mainstream, it invests in rapidly growing and misperceived companies believed to present compelling opportunities for substantial gain.

The tax-exempt asset mix Jan. 1 was 90% stocks and 10% cash.

The firm had a net loss in tax-exempt business for 1985 of $7 million. Three tax-exempt clients were added.

BMI is wholly owned by Brean Murray, Foster Securities Inc.

Clients include GTE, Union Pacific, Upjohn and Norton.

James D. Awad, president, and Francis J. Houghton Jr., chairman, are the chief investment officers. Sandra A. Jerro, vice president, is the client contact.

International advisers are profiled in the Aug. 4 issue.

Boatmen's First National Bank of Kansas City

P.O. Box 38, Kansas City, Mo. 64183; (816) 221-2800

Total assets managed	$3,260,000,000
Tax-exempt assets managed:	
Total	$920,000,000
Commingled accounts	$298,000,000
Separate accounts	$622,000,000
Passive assets managed	$55,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	187
Separate	25
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	3

Boatmen's First National Bank of Kansas City is an equity, fixed-income and balanced manager.

Its top-down equity approach combines market timing, equity valuation, momentum studies and sector rotation techniques.

Its top-down approach to fixed income uses technical and sector analysis and trend determination.

The Jan. 1 tax-exempt asset mix was 62% stocks and 38% bonds.

The bank is affiliated with The Boatmen's National Bank, St. Louis, and belongs to Boatmen's Bank Shares, a holding company.

Dwayne K. White, senior vice president, is chief investment officer. James Cole, vice president, is client contact.

The Boatmen's National Bank of St. Louis

P.O. Box 7365, St. Louis, Mo. 63177; (314) 425-3616

Total assets managed	$6,197,000,000
Tax-exempt assets managed	$4,500,000,000
Real estate assets managed	$800,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	6

The Boatmen's National Bank of St. Louis is an equity, fixed-income and balanced manager with guaranteed investment contract capabilities.

The equity approach uses a combination of value and momentum measurements to screen stocks and determine their relative attractiveness. Options are used.

The fixed-income approach is based upon interest rate anticipation and active maturity management.

The Jan. 1 tax-exempt asset mix was 40% stocks, 50% bonds and 10% mortgage-backed securities.

Managers follow 100 stocks closely and 630, generally; half the research is generated internally.

Clients include Interco, Laclede Gas and The Principia.

Russell W. Murphy, senior vice president, is chief investment officer. Stephen G. Saffa, trust marketing officer, is client contact.

Bostian Research Associates Inc.

360 Madison Ave., New York, N.Y. 10017; (212) 907-0180

Total assets managed	$12,000,000
Tax-exempt assets managed	$8,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	3

Bostian Research Associates Inc. employs a disciplined market-timing approach based on economic and quantitative data of a proprietary nature for both equity management and stock index futures.

The net gain in new tax-exempt business during 1985 was $7 million, all in stock index futures. Two tax-exempt clients were added.

The tax-exempt asset mix Jan. 1 was 30% stocks and 70% index futures. The firm also uses options.

Clients include Loews and K mart.

David B. Bostian Jr., president, is the chief investment officer and client contact.

The Boston Co. Inc.

1 Boston Place, Boston, Mass. 02106; (617) 722-6970

Total assets managed	$9,520,000,000
Tax-exempt assets managed	$6,156,000,000
Real estate assets managed	$1,272,000,000
401(k) and 457 assets managed	$98,000,000
Passive assets managed	$533,000,000
Tax-exempt clients	151
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	17

The Boston Co. offers equity, fixed-income, balanced, real estate and oil and gas capabilities.

Stock selection and industry emphasis are determined through quantitative, value-oriented screening, fundamental company analysis and industry research disciplines. It focuses on undervalued stocks relative to earnings and dividend growth that have strong prospects for appreciation.

Its fixed-income approach emphasizes interest rate anticipation, resulting in major maturity shifts over market cycles, but avoiding the risks of extreme strategies. Portfolios are positioned in the best relative value as to industry and quality sectors.

Its real estate team specializes in convertible mortgage investments.

Options and stock index futures are used.

The asset mix Jan. 1 was 28% stocks, 45% bonds, 4% cash, 21% equity real estate and 2% oil and gas.

Clients include Iowa Public Employees, Emery Air Freight, GM and Atlanta.

James N. von Germeten is president and chief investment officer; John R. Snow, vice president, is client contact.

Boston Financial Real Estate Advisors

225 Franklin St., Boston, Mass. 02110; (617) 542-4475

Total assets managed	$3,500,000,000
Tax-exempt assets managed	$0
Minimum separate account	$25,000,000
No. of portfolio managers	6
Size of research staff	55

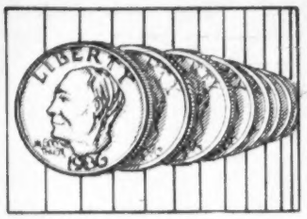
Boston Financial Real Estate Advisors uses value/price orientation in secondary growth cities to design diverse portfolios in both property mix and geographical exposure for clients.

25 largest managers of bond index funds

Rank	Managers	$ millions
1.	Mellon Bank	3,627
2.	Wells Fargo Investment Advisors	2,326
3.	State Street Bank & Trust	1,079
4.	Bankers Trust-Investment Management Group	1,000
5.	American National Bank & Trust, Chicago	800
6.	Lehman Management	750
7.	Manufacturers National Bank of Detroit	558
8.	Mellon Capital Management	480
9.	Brown Brothers Harriman & Co.	320
10.	Dimensional Fund Advisors	178
11.	T. Rowe Price Associates	125
12.	The Griffin Group	65
13.	Seafirst Bank	60
14.	Prudential Asset Management Group	57
15.	First Asset Management	54
16.	MacKay-Shields Financial	50
17.	Aetna Life and Casualty	47
18.	Ward & Wissner Capital Management	42
19.	Putnam Advisory	40
20.	Bank of New York	40
21.	Harris Trust and Savings Bank	40
22.	Equitable Capital Management	32
23.	Favia Hill & Associates	30
24.	First Maryland Asset Management	28
25.	General American Life Insurance	28
	TOTAL	11,856

25 largest managers of equity index funds

Rank	Managers	$ millions
1.	Wells Fargo Investment Advisors	22,859
2.	Bankers Trust-Investment Management Group	18,160
3.	American National Bank & Trust, Chicago	7,177
4.	Mellon Capital Management	6,920
5.	State Street Bank & Trust	2,733
6.	Dimensional Fund Advisors	2,169
7.	Wilshire Associates	2,050
8.	Northern Trust	800
9.	Alliance Capital Management	709
10.	Manufacturers National Bank of Detroit	570
11.	Chase Investors Management	540
12.	Vanguard Group of Investment Companies	442
13.	Prudential Asset Management Group	322
14.	Grantham, Mayo, Van Otterloo & Co.	317
15.	RepublicBank, Dallas	252
16.	Boston Co.	205
17.	Tenneco Asset Management	200
18.	Aetna Life and Casualty	149
19.	Metropolitan Life Insurance	120
20.	Irving Trust	100
21.	Citicorp Investment Management	88
22.	National Bank of Detroit	87
23.	Harris Trust and Savings Bank	85
24.	BA Investment Management	77
25.	Travelers Companies	75
	TOTAL	67,206



The firm, which is affiliated with the Boston Financial Group Inc., is marketing its Equity Group Trust, and has received a commitment for $5 million.

Duncan A. Christie is chief investment officer. Client contact is Peter F. Tague III.

Bounty Management Corp.

99 Bedford St., Boston, Mass. 02111; (617) 357-8285

Total assets managed	$80,000,000
Tax-exempt assets managed	$47,000,000
Minimum separate account	$250,000
Tax-exempt clients	64
Types of accounts managed	CE
No. of portfolio managers	2
Size of research staff	2

Bounty Management Corp. is an equity and balanced manager.

In equities, the firm uses a combination of momentum and value investing, based on a contrarian approach, both top-down and bottom-up.

In fixed income, it emphasizes interest rate anticipation, swinging in and out on the Treasury yield curve based on year to year interest rate forecasts.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

Clients include Charlton School, Crozer Theological Seminary, McNamee and Local No. 8 pension plan.

Raymond N. Bligh, president, is chief investment officer and client contact.

G. Waring Boys Co. Inc.

P.O. Box 15167, Asheville, N.C. 28803; (704) 274-1542

Total assets managed	$96,000,000
Tax-exempt assets managed	$50,000,000
Real estate assets managed	$3,000,000
Minimum separate account	$300,000
Tax-exempt clients	36
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	2

G. Waring Boys Co. Inc. is a balanced manager.

In equities, the firm emphasizes growth stock, low p/e and market timing. It stresses a value-oriented, fundamental and disciplined approach, with a mix of growth and income stocks.

In fixed income, it relies on interest rate anticipation. The strategy emphasizes high quality and liquidity, plus sector and maturity diversification.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

G. Waring Boys, president, is chief investment officer. Client contact is Thomas C. Arnold, senior vice president.

Stacey Braun Associates

377 Broadway, New York, N.Y. 10013; (212) 226-7707

Total assets managed	$774,000,000
Tax-exempt assets managed	$774,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	46
Types of accounts managed	GJ
No. of portfolio managers	4

Stacey Braun Associates Inc. is a balanced manager that relies on Graham & Dodd principles in its equity approach. The major criteria in selecting stocks are reasonably consistent earnings growth, low p/e and dependable dividends for above-average yields.

In fixed income, the firm relies on interest rate forecasts.

As of Jan. 1, the asset mix was 30% stocks, 69% bonds (including GNMAs) and 1% cash.

The firm experienced a net gain in new tax-exempt business in 1985 of $61 million. Seven tax-exempt clients were added.

Clients include Laborers National Pension, UPS Union and the American Guild of Musical Artists.

Martin H. Wexler, president, is chief investment officer. Client contact is Elizabeth Stirling, vice president.

Breau Capital Management

66 Beacon St., Boston, Mass. 02108; (617) 367-0806

Total assets managed	$140,000,000
Tax-exempt assets managed	$140,000,000
401(k) and 457 assets managed	$10,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	9
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	1

Breau Capital Management Inc. manages value-oriented equity portfolios for a limited number of pension funds and endowments. Emphasis is on low p/e and price-to-book multiples, undervalued assets and overlooked companies. The asset mix Jan. 1 was 70% stocks and 30% cash.

In 1985, the firm had a net gain in new tax-exempt business of $14.9 million. Three tax-exempt clients were added. It follows 100 stocks closely; 90% of research is generated internally.

Edward P. Breau, president, is chief investment officer and client contact.

Daniel Breen & Co.

3400 RepublicBank, P.O. Box 61529, Houston, Texas 77208; (713) 223-2110

Total assets managed	$426,000,000
Tax-exempt assets managed	$386,000,000
Tax-exempt clients	17
Types of accounts managed	CEFGJ
No. of portfolio managers	5

Daniel Breen & Co. is an equity, fixed-income and balanced manager.

In equities, it blends fundamental analysis with unique relative valuation computer screens for both stock selection and identification of market environment. It uses a proprietary rotational approach, taking a low-risk profile with significant reward potential.

In fixed income, a specific set of criteria including valuation models help to assess interest rate trends. Disciplined risk/reward parameters are used and Treasuries are emphasized.

The asset mix Jan. 1 was 82% stocks, 17% bonds and 1% cash.

The firm gained seven tax-exempt clients in 1985 and had a $201 million gain in new tax-exempt business.

Daniel A. Breen, president, is the chief investment officer. Edward S. McCullough, senior vice president, is the client contact.

Brignoli, Curley & Roberts Associates

15 W. 39th St., New York, N.Y. 10018; (212) 869-4233

Total assets managed	$501,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	14
Types of accounts managed	CGJ
Size of research staff	5

Brignoli, Curley & Roberts Associates, an equity manager, uses a quantitatively derived and controlled equity process that concentrates on a sophisticated diversification technique and a disciplined trading strategy to provide substantial incremental return with significantly low risk.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The net gain in new tax-exempt business during 1985 was $461 million; 14 tax-exempt clients were added.

The firm follows 700 stocks closely and 700 generally; 99% of research is generated internally.

Clients include Eastman Kodak, U S WEST, United Technologies and Westinghouse.

Jac Curley, partner, is the chief investment officer. Duane G. Roberts, partner, is the client contact.

John W. Bristol & Co. Inc.

233 Broadway, New York, N.Y. 10279; (212) 267-9000

Total assets managed	$1,400,000,000
Tax-exempt assets managed	$1,300,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	30
Types of accounts managed	EF
No. of portfolio managers	5

John W. Bristol & Co., a balanced manager, uses a growth stock approach to equity and an interest rate anticipation approach to fixed income.

The tax-exempt asset mix Jan. 1 was 80% stocks, 15% bonds and 5% cash.

Three tax-exempt clients were added last year.

Half of its research is generated internally; 100 stocks are followed closely and 200, generally.

Clients include Princeton University, Swarthmore College, Colorado College and Clark Art Institute.

Charles H. Mott, president, is chief investment officer and client contact.

Britannia International Asset Management Ltd.

74/78 Finsbury Pavement, London, England EC2A 1JD; (01) 588-2777

Total assets managed	$27,000,000
Tax-exempt assets managed	$15,000,000
International assets managed	$15,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	5

Britannia International Asset Management Ltd., an international equity manager, bases its approach on growth stock.

It adopts a low-risk approach to geographic and asset allocation and looks to its stock selection expertise to be the main factor in producing above-average performance.

The asset mix Jan. 1 was 87% stocks and 13% overseas currencies.

The firm is a subsidiary of Britannia Arrow Holdings PLC, which has total assets of $6 billion and tax-exempt assets of $3 billion.

David C. Gillan, managing director, is chief investment officer and client contact.

Alex. Brown Investment Management

135 E. Baltimore St., Baltimore, Md. 21202; (301) 727-1700

Total assets managed	$620,000,000
Tax-exempt assets managed	$369,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	58
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	1

Alex. Brown Investment Management, a Maryland limited partnership, manages equity and balanced accounts.

For equities, it uses flexible value investing, emphasizing stocks that are overlooked or out of favor.

For fixed income, it stresses high income and stability of principal. It particularly looks for short and intermediate maturities, high quality, high coupons and liquidity.

The asset mix Jan. 1 was 60% stocks, 25% bonds and 15% cash.

In the year ended Dec. 31, the firm had a net gain of $73 million; 10 tax-exempt clients were added.

It follows 120 stocks closely and 300, generally. Ten percent of research is generated internally.

J. Dorsey Brown III, general partner, is the chief investment officer and client contact.

Alex. Brown Realty Advisors

225 E. Redwood St., Baltimore, Md. 21202; (301) 727-3884

Total assets managed	$1,100,000,000
Tax-exempt assets managed	$600,000,000
Real estate assets managed	$600,000,000
Minimum separate account	$1,000,000,000
Tax-exempt clients	3
Types of accounts managed	G

Alex. Brown Realty Advisors emphasizes geographical and product selection plus optimal use of a variety of investment structures in its investment approach.

As of Jan. 1, all of its tax-exempt assets were in equity real estate.

The firm experienced a net gain in new tax-exempt assets in 1985 of $319 million; 1 client was added.

Clients include Texas Teachers, Oregon Public Employees and Virginia Supplemental Retirement Systems.

The firm is affiliated with Alex. Brown & Sons Inc. and Alex. Brown Investment Management.

Robert H. Gidel, president is the chief investment officer and client contact.

Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005; (212) 483-1818

Total assets managed	$9,847,000,000
Tax-exempt assets managed	$5,881,000,000
International assets managed	$143,000,000
Passive assets managed	$370,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	290
Types of accounts managed	CEFGJ
No. of portfolio managers	65
Size of research staff	25

Brown Brothers Harriman & Co. offers equity, fixed-income, balanced and international capabilities.

Basing its approach on Graham & Dodd, it uses stock selection, diversification and market timing for equity accounts and equity components of balanced accounts.

In fixed income, the firm takes an activist approach, using sector and individual issue swapping, as well as interest rate anticipation.

The tax-exempt asset mix Jan. 1 was 25% stocks, 33% bonds, 26% cash and 16% mortgage-backed securities.

The firm added 45 tax-exempt clients in 1985 and experienced a $146 million loss in tax-exempt assets.

The firm uses options and stock index futures.

Seventy percent of the research is generated in-house; 280 stocks are followed closely and 500, generally.

Elbridge T. Gerry Jr., partner, is chief investment officer. Client contact is Frank J. Keeler, manager.

C.H. Brown Inc.

165 S. Plaza Building, Minneapolis, Minn. 55416; (612) 544-8411

Total assets managed	$60,000,000
Tax-exempt assets managed	$45,000,000
International assets managed	$1,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	36
Types of accounts managed	CJ
No. of portfolio managers	2
Size of research staff	1

C.H. Brown Inc. is a balanced manager, whose strategy is a top-down, macroeconomic approach. It emphasizes total return, employing control strategies, giving 15 years with a standard deviation of 7.2%. Investment vehicles are normally medium- to high-cap equities.

Bonds or cash may be used as alternatives when appropriate. It uses interest rate anticipation in fixed income. Options are used.

The asset mix Jan. 1 was 70% stocks and 30% cash.

Richard H. Brown, president, is chief investment officer and client contact.

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San Francisco, CA 90071
(213) 613-3718

437 Madison Avenue
New York, NY 10022
(212) 223-7171 (effective June 1)

obert C. Brown & Co. Inc.

5 Montgomery St., Suite 1500, San Francisco, Calif. 94111; (415) 981-4050

l assets managed $1,504,000,000
-exempt assets managed $1,396,000,000
imum separate account $5,000,000
-exempt clients 32
es of accounts managed ..... CFGJ
of portfolio managers 6
of research staff 6

Robert C. Brown & Co. Inc., a fixed-ome manager, seeks to conserve ncipal and maximize total risk-usted rates of return through the ive modification of portfolio dura-.

ll of the firm's tax-exempt assets re in bonds as of Jan. 1.

Four tax-exempt clients were added 1985; the firm experienced a net s in tax-exempt business of $270 ion.

ll of the firm's research is gen-ted in-house. It uses options and d-income futures.

Clients include Boeing, Hercules, nsas Public Employees and Stan-d Oil.

Robert C. Brown, president, is chief estment officer. Client contacts are nald C. DeLutis and Ernest Voigt, cutive vice presidents.

undage, Story and Rose

roadway, New York, N.Y. 10004; 212) 269-3050

l assets managed $2,858,000,000
-exempt assets managed $1,664,000,000
imum separate account $500,000
-exempt clients 341
es of accounts managed ..... CEFG
of portfolio managers 22

Brundage, Story and Rose is an ity and balanced manager.

n equities, the firm takes a top-wn, long-term fundamental proach that emphasizes preserva-n of capital. The firm relies on wth stock, Graham & Dodd prin-es and value in its approach.

n fixed income, it uses interest rate icipation, stressing high quality urities, primarily U.S. government, chased in the one- to five-year turity range.

The asset mix Jan. 1 was 80% cks, 15% bonds and 5% cash.

Ninety percent of the research is nerated internally; 200 stocks are owed closely and 500, generally.

Clients include Ohio Operating Engi-ers, Westvaco, Alcoa and Consoli-ed Natural Gas.

Malcolm D. Clarke Jr. and Charles Watson are chief investment offi-s and client contacts.

ffalo Capital Corp.

50 Von Karman, No. 490, Newport Beach, Calif. 92660; (714) 476-2799

l assets managed $10,000,000
-exempt assets managed $7,000,000
rnational assets managed $1,000,000
imum separate account $15,000
-exempt clients 26
es of accounts managed ..... CG
of portfolio managers 2
of research staff 1

Buffalo Capital Corp. is a mutual d timing company that offers a ensive capability to the traditional -and-hold investor. Its strategy sses market timing and emerging wth.

On Jan. 1, the firm was fully invested tocks.

During 1985, the firm had a $3 mil-n net gain in new tax-exempt busi-s; five clients were added.

Clients include Kern County Employ-s and United Artists Communica-s.

Mark A. Hoppe is chief investment cer and client contact.

rnham & Co.

? Federal Square Building, Grand Rapids, Mich. 49509; (616) 459-1043

l assets managed $250,000,000
-exempt assets managed $150,000,000
imum separate account $200,000
-exempt clients 100
es of accounts managed ..... EFGJ
of portfolio managers 1
of research staff 2

income and balanced manager, emphasizing growth stocks in its equity approach and interest rate anticipation in fixed-income investing. The firm uses options.

The asset mix Jan. 1 was 30% stocks, 65% bonds and 5% cash.

Thirty stocks are followed closely and 75, generally.

Clients include Kalamazoo County, Muskegon Plumbers & Pipefitters Local 154 and Oakland County.

Robert W. Burnham is chief investment officer and client contact.

Cadinha & Co. Inc.

900 Fort St., Suite 1240, Honolulu, Hawaii 96813; (808) 523-9488

Total assets managed $80,000,000
Tax-exempt assets managed $63,000,000
Minimum separate account $1,000,000
Tax-exempt clients 79
Types of accounts managed ..... CEFGJ
No. of portfolio managers 3
Size of research staff 2

Cadinha & Co. Inc. is a balanced manager. Its equity approach uses fundamental analysis to determine anticipated growth of companies.

In fixed income, yield curve analysis is used to determine the proper maturity placement of high-quality debt instruments. Interest rate anticipation is emphasized.

The asset mix Jan. 1 was 50% stocks, 35% bonds and 15% cash.

Harlan J. Cadinha, president, is chief investment officer. Janis C. Akuna, vice president, is client contact.

Calcasieu Marine National Bank

Trust Department, P.O. Box 3403, Lake Charles, La. 70602; (318) 494-3319

Total assets managed $64,000,000
Tax-exempt assets managed:
Total $32,000,000
Commingled accounts $8,500,000
Separate accounts $23,500,000
International assets managed $100,000
Minimum separate account $50,000
Tax-exempt clients:
Commingled 15
Separate 42
Types of accounts managed ..... CGJ
No. of portfolio managers 1

Calcasieu Marine National Bank is a balanced manager.

It employs a long-term, top-down approach to equity portfolio management. It is conservative with specific selections and prefers companies that have strong balance sheets, stable margins, ROE and good prospects. Options are used. Interest rate anticipation is the primary approach to fixed-income; yield spreads and sector analysis are secondary.

As of Jan. 1 the mix of tax-exempt assets was 20% stocks, 45% bonds and 35% cash.

James E. Rickenbacker, trust investment officer, is chief investment officer. Client contact is Frederick Lee, vice president and trust officer.

California First Capital Management

7807 Girard Ave., La Jolla, Calif. 92037; (619) 454-3104

Total assets managed $102,000,000
Tax-exempt assets managed $102,000,000
401(k) and 457 assets managed $10,000,000
Minimum separate account $5,000,000
Tax-exempt clients 12
Types of accounts managed C
No. of portfolio managers 3

California First Capital Management is an equity manager investing in small-capitalization, aggressive growth stocks. The firm has a bottom-up, earnings-oriented stock selection process.

The asset mix Jan. 1 was 100% stocks.

Clients include Pacific Lighting, Intel Corp. and Alumax.

The firm is a subsidiary of California First Bank.

William Jeffery III, president, is chief

25 largest mortgage advisers

Rank	Managers	$ millions
1.	MONY Financial Services	1,536
2.	J.P. Morgan Investment	1,044
3.	Aetna Life and Casualty	875
4.	Wachovia Bank & Trust	786
5.	F.I.A. Associates	761
6.	L&B Real Estate Advisors	700
7.	Transamerica Investment Services	569
8.	Karsten Institutional Realty Advisors	558
9.	Fidelity Bank	506
10.	Agrivest	450
11.	Mellon Real Estate Investment Management	441
12.	Lomas & Nettleton	428
13.	Manufacturers Hanover Investment	398
14.	L.J. Melody & Co.	362
15.	Equitable Real Estate Investment Management	316
16.	Wells Fargo Realty Advisors	284
17.	Citicorp Investment Management	257
18.	Am Cal	223
19.	Valley National Bank of Arizona	223
20.	United of Omaha Life Insurance	216
21.	MidAmerica Management	215
22.	Prudential Asset Management Group	210
23.	Mortgage Investors Group	159
24.	Schroder Real Estate Associates	130
25.	National Bank of Washington	112
	TOTAL	11,759

vice president-development, is client contact.

Cambiar Investors Inc.

8400 E. Prentice Ave., No. 460, Englewood, Colo. 80111; (303) 793-3939

Total assets managed $208,000,000
Tax-exempt assets managed $148,000,000
International assets managed $32,000,000
Minimum separate account $5,000,000
Tax-exempt clients 85
Types of accounts managed ..... CEFG
No. of portfolio managers 3
Size of research staff 1

Cambiar Investors Inc. is an equity manager dedicated to positive annual performance and capital preservation. The firm follows a risk-averse fundamental approach, seeking reasonably priced, sound businesses with potential for positive surprises at points of inflection for a minimum 50% appreciation.

The tax-exempt asset mix Jan. 1 was 82% stocks and 18% cash.

Michael S. Barish, president, is chief investment officer. Client contact is James C. Vogelzang, president, Vogelzang & Associates, P.O. Box 890, Calistoga, Calif. 94515.

James T. Cambier Investments

366 Love Lane, Danville, Calif. 94526; (415) 820-1164

Total assets managed $4,000,000
Tax-exempt assets managed $2,000,000
Minimum separate account $100,000
Tax-exempt clients 8
Types of accounts managed ..... CEFJ
No. of portfolio managers 1

James T. Cambier Investments is a value equity manager that uses low p/e and Graham & Dodd principles in its approach.

Issues are sought whose technical and fundamental characteristics indicate they are poised to discount future positive developments.

Sector analysis is used in fixed income.

The asset mix Jan. 1 was 95%

25 largest managers of mortgage-backed securities

Rank	Managers	$ millions
1.	Scudder, Stevens & Clark	2,800
2.	Alliance Capital Management	2,759
3.	Miller, Anderson & Sherrerd	2,059
4.	Morgan Stanley Asset Management	1,952
5.	J.P. Morgan Investment	1,000
6.	Transamerica Investment Services	988
7.	Brown Brothers Harriman & Co.	950
8.	Lincoln Capital Management	850
9.	Boatmen's National Bank	800
10.	State Street Bank & Trust	800
11.	Lehman Management	780
12.	Rosenberg Capital Management	540
13.	Fischer, Francis, Trees & Watts	500
14.	Glenmede Trust	450
15.	Western Asset Management	400
16.	Crocker Investment Management	380
17.	Wellington/Thorndike, Doran	375
18.	American Fletcher National Bank	350
19.	Midlantic National Bank	350
20.	Mercantile Trust	308
21.	MidAmerica Management	300
22.	Wachovia Bank & Trust	290
23.	MacKay-Shields Financial	250
24.	Massachusetts Financial Services	225
25.	Todd Investment Advisors	225
	TOTAL	20,681

stocks and 5% cash.

James T. Cambier, president, is chief investment officer and client contact.

Campbell Advisors Inc.

342 Madison Ave., New York, N.Y. 10173; (212) 689-6960

Total assets managed $852,000,000
Tax-exempt assets managed $750,000,000
Minimum separate account $10,000,000
Tax-exempt clients 26
Types of accounts managed ..... CEF
No. of portfolio managers 5

Campbell Advisors Inc. is an equity manager that emphasizes growth stock and sector rotation in its equity approach.

It uses interest-rate anticipation in fixed income.

The asset mix Jan. 1 was 97% stocks and 3% cash.

Clients include General Dynamics, First Boston, Rockefeller Foundation and TRW.

Douglas Campbell Jr., president, is chief investment officer. Kenneth C. Swenson, vice president, is client contact.

The Campbell Group Inc.

1 S.W. Columbia, Suite 1720, Portland, Ore. 97258; (503) 226-3077

Total assets managed $13,000,000
Tax-exempt assets managed $9,000,000
Minimum separate account $1,000,000
Tax-exempt clients 1
Types of accounts managed ..... CJ
No. of portfolio managers 1
Size of research staff 2

The Campbell Group Inc. is in timber acquisition and management.

Timber is purchased at a discount from current prices and is harvested at optimum realization, considering growth, maturity, export/domestic demand conditions and market prices.

All assets were in timber as of Jan. 1.

The firm is the exclusive agent for West Coast timber acquisition and management for the John Hancock Insurance Co.

J. Duncan Campbell Jr., president, is chief investment officer and client contact.

Campbell, Newman, Pottinger & Associates Inc.

777 E. Wisconsin Ave., No. 3080, Milwaukee, Wis. 53202; (414) 276-0380

Total assets managed $229,000,000
Tax-exempt assets managed $88,000,000
401(k) and 457 assets managed $2,000,000
Minimum separate account $500,000
Tax-exempt clients 29
Types of accounts managed ..... CEF
No. of portfolio managers 3
Size of research staff 1

Campbell, Newman, Pottinger & Associates Inc. is a balanced manager.

In equities, the firm emphasizes low p/e, sector rotation and Graham & Dodd principles. It identifies companies whose growth prospect, financial strength and management quality are not fully reflected in current price.

Interest rate anticipation and sector analysis are used in fixed income.

The asset mix Jan. 1 was 60% stocks, 35% bonds and 5% cash.

Leonard Campbell Jr. is chief investment officer and client contact.

Canagex Placements Ltee

625 Dorechester Blvd. West, Suite 600, Montreal, Quebec H3B 1R2; (514) 879-9272

Total assets managed ..... $2,080,000,000(U.S.)
Tax-exempt assets managed $984,000,000
Minimum separate account $3,000,000
Tax-exempt clients 32
Types of accounts managed ..... CFU
No. of portfolio managers 12

Canagex Placements Ltee, a Canadian manager, handles equity, fixed-income and balanced accounts.

In equities, the firm manages the portfolio according to the risk/return criterion anticipated for the market, the industry and the stock, given the portfolio's constraints and the firm's recommended asset mix selection.

rity investments and swap strategies to optimize the portfolio's return/risk ratio.

The asset mix Jan. 1 was 35% Canadian stocks, 50% bonds, 5% cash and 10% U.S. stocks.

Claude Lemire, president, is chief investment officer and client contact.

Capital Advisors Inc.

320 S. Boston, Suite 908, Tulsa, Okla. 74103; (918) 599-0045

Total assets managed	$250,000,000
Tax-exempt assets managed	$220,000,000
401(k) and 457 assets managed	$3,000,000
Real estate assets managed	$11,000,000
Minimum separate account	$150,000
Tax-exempt clients	50
Types of accounts managed	CFG
No. of portfolio managers	2
Size of research staff	1

Capital Advisors Inc. is an equity and balanced manager.

In equities, it is a top-down manager. Its approach stresses low p/e, sector rotation and Graham & Dodd.

In fixed income, it staggers obligations within one- to seven-year maturities and overweights one end in anticipation of interest rate cycles.

The asset mix Jan. 1 was 35% stocks, 50% bonds, 10% cash and 5% mortgage-backed securities.

The chief investment officer is Richard E. Minshall. Client contact is Lawrence D. Field.

Capital Counseling Service

Bank of America, 555 California St., San Francisco, Calif. 94104; (415) 622-6052

Total assets managed	$30,000,000
Tax-exempt assets managed	$25,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	10
Types of accounts managed	CF
No. of portfolio managers	2

Capital Counseling Service is a balanced manager that emphasizes value-oriented situations with above-average total return.

As of Jan. 1, the tax-exempt asset mix was 60% stocks and 40% bonds and cash.

In 1985, there was a net gain in new tax-exempt business of $6 million. Two clients were added.

Equity and fixed-income research is provided by BA Investment Co.

Capital Counseling is owned by Bank of America.

Robert C. Barrett, Bank of America vice president, is chief investment officer. J.W. Vitalone, senior investment officer, is the client contact.

Capital Guardian Trust Co.

333 S. Hope St., Los Angeles, Calif., 90071; (213) 486-9200

Total assets managed	$12,955,000,000
Tax-exempt assets managed	$12,883,000,000
International assets managed	$1,906,000,000
401(k) and 457 assets managed	$290,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	106
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	51

Capital Guardian Trust Co. offers equity and international capabilities.

Applying Graham & Dodd, its fundamental investment approach is based on thorough, detailed research and analysis with an emphasis on value.

Its fixed-income approach is two-thirds interest rate anticipation and one-third security selector. The firm makes strategic adjustments to portfolio maturities based upon its perception of interest rate trends. The perceptions are based upon global analysis of economic and political events.

The asset mix Jan. 1 was 79% stocks, 9% bonds and 12% cash.

For 1985, the firm had a $167 million net gain in new tax-exempt business; 13 tax-exempt clients were added.

The firm's parent company is the Capital Group Inc. Assets under management by the parent and all subsidiaries total $25.54 billion, of which $16.52 billion is tax-exempt.

Clients include Armco, International Paper, Mobil and Boeing.

Richard C. Barker, firm president and chairman of the investment committee, is the chief investment officer. John H. Seiter, senior vice president, and Philip A. Swan, marketing associate, are the client contacts.

Capital Management International GmbH

9 W. 57th St., New York, N.Y. 10019; (212) 832-1630

Total assets managed	$153,000,000
Tax-exempt assets managed	$153,000,000
International assets managed	$119,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	5

Capital Management International GmbH of Deutsche Bank is an equity and international manager.

The firm's top-down equity approach emphasizes asset, currency and country allocation and sector rotation. Stock selection stresses large-cap, high quality and low p/e. In fixed income, the firm relies on interest rate anticipation in conjunction with currency movements.

The asset mix Jan. 1 was 97% stocks and 3% cash.

The firm is wholly owned by Deutsche Bank AG, which has $2 billion in assets under management.

Rudolf Heinz, executive vice president, is chief investment officer. Michael Tintelnot, vice president, is the client contact.

Capital Research and Management Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

Total assets managed	$11,354,000,000
Tax-exempt assets managed	$2,150,000,000
International assets managed	$198,000,000
401(k) and 457 assets managed	$90,000,000
Tax-exempt clients	525
Types of accounts managed	CEFGJ
No. of portfolio managers	14
Size of research staff	51

Capital Research and Management Co., specializing in mutual funds, manages equity, bond, balanced, global, international and money market accounts.

Its value-oriented equity management is driven by fundamental research. Fund portfolios are built from the bottom up.

In fixed income, managers make strategic adjustments to portfolio maturities based upon their perception of interest rate trends. The perceptions are based upon a global analysis of economic and political events.

Clients include the Chicago Transit Authority, American Cyanamid, Campbell Soup and University of Oregon Foundation. The parent company is Capital Group Inc.

Chief investment officer is William C. Newton, chairman-investment committee and vice chairman of the board. Client contact is Benjamin H. Shattuck, senior vice president, American Funds Distributors Inc., Institutional Investment Services Division.

Capital Supervisors Inc.

20 N. Clark St., Suite 700, Chicago, Ill. 60602; (312) 236-8271

Total assets managed	$4,880,000,000
Tax-exempt assets managed	$4,828,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	52
Types of accounts managed	CEFG
No. of portfolio managers	8

Capital Supervisors Inc. is a balanced, equity and fixed-income manager.

In equities, market timing and market-sector selection are viewed as the key determinants of consistent performance.

In fixed income, the firm uses a combination of interest rate anticipation and sector analysis. Portfolios are managed actively to achieve total returns in excess of the returns from a buy-and-hold strategy.

The asset mix Jan. 1 was 48% stocks, 38% bonds and 14% cash.

The firm netted $19 million in new tax-exempt business in 1985 and gained three tax-exempt clients.

Half of the research is generated internally, with 75 stocks followed closely and about 150, generally.

Clients include Chicago Public School Teachers, Kentucky Retirement Systems, Kansas Public Employees and General Binding.

A. Lee Thurow, chairman of the board, is chief investment officer. Client contact is James C. Seyfarth, senior vice president.

Capital Technology Inc.

P.O. Box 2428, Charlotte, N.C. 28211; (704) 541-1437

Total assets managed	$53,000,000
Tax-exempt assets managed	$46,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	16
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	2

Capital Technology Inc. is an equity manager that selects small-cap, fast-growing, high-value equities. The emphasis is on finding investments at low p/e.

The asset mix Jan. 1 was 98% stocks and 2% cash.

The firm netted $9 million in new tax-exempt business in 1985. Five tax-exempt clients were added.

Clients include E-Systems, Inductotherm Industries, Meadows Foundation and South Carolina E&G.

James D. Nisbet, president, is chief investment officer. Client contact is Robb W. Rowe, executive vice president.

Capital Trust Co.

4380 S.W. Macadam Ave., Suite 450, Portland, Ore. 97201; (503) 228-2300

Total assets managed	$490,000,000
Tax-exempt assets managed	$279,000,000
Real estate assets managed	$24,000,000
401(k) and 457 assets managed	$89,000,000
Passive assets managed	$50,000,000
Tax-exempt clients	96
Types of accounts managed	CFGJ
No. of portfolio managers	5
Size of research staff	1

Capital Trust Co. is an equity, fixed-income, balanced and GIC manager.

Sector rotation and Graham & Dodd principles are emphasized in its equity approach, and managers rely on interest rate anticipation and sector analysis in its approach to fixed-income investments. Options also are used.

As of Jan. 1, the asset mix was 41% stocks, 31% bonds, 3% cash, 4% equity real estate, 5% mortgages, 1% mortgage-backed securities and 15% GICs.

The firm added 43 tax-exempt clients in 1985 and netted $80 million in new tax-exempt business.

Clients include Idaho Public Employees and Hyster.

Ralph C. Rittenour Jr., president, is the chief investment officer. Client contacts are Karen Halliday, director of marketing, and Charles J. Swindells, chairman.

Capitol Bank & Trust Co.

1 Bulfinch Place, Boston, Mass. 02114; (617) 723-5300

Total assets managed	$221,000,000
Tax-exempt assets managed:	
Total	$211,000,000
Separate accounts	$211,000,000
International assets managed	$20,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	12
Types of accounts managed	CEFGJ
No. of portfolio managers	2
Size of research staff	2

Capitol Bank & Trust Co. is an equity, fixed-income and balanced manager.

25 largest real estate managers ranked by equity real estate assets

Rank	Managers	$ millions
1.	Prudential Asset Management Group	5,828
2.	Equitable Real Estate Investment Management	4,383
3.	Copley Real Estate Advisors	3,500
4.	Corporate Property Investors	2,400
5.	The RREEF Funds	2,265
6.	Heitman Advisory	2,100
7.	Aetna Life and Casualty	2,055
8.	Richard Ellis	1,510
9.	JMB Institutional Realty	1,500
10.	LaSalle Advisors	1,500
11.	Boston Co.	1,272
12.	Eastdil Realty	1,200
13.	J.P. Morgan Investment	1,133
14.	CIGNA	864
15.	Trust Company of the West	820
16.	Schroder Real Estate Associates	802
17.	Coldwell Banker Capital Management	800
18.	First Chicago Investment Advisors	789
19.	Security Capital Real Estate	745
20.	John Hancock Financial Services	708
21.	Wachovia Bank & Trust	648
22.	Alex. Brown Realty Advisors	600
23.	L&B Real Estate Advisors	600
24.	Kennedy Associates	568
25.	Citicorp Investment Management	557
	TOTAL	39,147

NUMBER ONE IN THE NON-U.S. EQUITY UNIVERSE OF INTERSEC RESEARCH CORP.

Capital Management International GmbH of Deutsche Bank

OUR INVESTMENT PHILOSOPHY:

- active, flexible, top-down country/currency selection
- fundamentally-oriented analysis
- risk-adverse approach

OUR RESULTS:

Total Return	4th quarter 85	Total Year 85
CMI	30.1%	72.9%
EAFE	16.6%	56.9%
S&P 500	17.1%	31.6%

- 40% risk reduction versus S&P 500
- significantly above-average performance

For further information please contact:

Rudolf Heinz, D-6000 Frankfurt 1, West Germany, Phone: (49) 69-72 25 22 as of June 1, 86, 714004-0, Telex: 4170 319 dbcm

Michael Tintelnot, 9 West 57th Street, New York, 10019 U.S.A. Phone: (212) 832-1630, Telex: 425 823 cmi-ny

In equities, secular developments determine stock selection. When expecting disinflation, managers concentrate in banks, thrifts, insurers and utilities. When expecting inflation, concentrations are in oil, technology and capital spending stocks.

The active fixed-income approach focuses on maturity and sector swaps in anticipation of secular change.

The Jan. 1 tax-exempt asset mix was 25% stocks, 70% bonds and 5% cash.

G. Peter Grote, vice president and senior trust officer, is chief investment officer. Annmarie Gradito, administration manager, is client contact.

Capitoline Investment Services Inc.

919 E. Main St., Richmond, Va. 23219; (804) 782-7222

Total assets managed	$4,104,000,000
Tax-exempt assets managed	$1,810,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	214
Types of accounts managed	CEFGJ
No. of portfolio managers	20
Size of research staff	5

Capitoline Investment Services Inc. is an equity, balanced and GIC manager.

In equities, the approach is opportunistic, changing the investment focus based on judgments of relative value.

In fixed income, the firm is an intermediate term manager with a 10-year maturity cap using sector and quality yield spread analysis to structure the portfolio.

Options are used.

The asset mix Jan. 1 was 35% stocks, 18% bonds, 18% cash and 29% GICs.

The firm netted $107 million in new tax-exempt business in 1985; 12 tax-exempt clients were added.

The firm generates 40% of the research internally, with 150 stocks watched closely and 750, generally.

Clients include Amtrak, Media General, Overnite Transportation and Sweet Briar College.

The firm is a wholly owned subsidiary of United Virginia Bank, with total assets of $4.13 billion and tax-exempt assets of $2.28 billion.

Ernest C. Frohboese, senior vice president, is chief investment officer. Client contact is William E. Heisler, vice president.

Carret and Co. Inc.

122 E. 42nd St., New York, N.Y. 10168; (212) 697-9340

Total assets managed	$200,000,000
Tax-exempt assets managed	$88,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	19
Types of accounts managed	CF
No. of portfolio managers	5

Carret and Co. Inc. is an equity manager whose approach is value-oriented, conservative and long-term. Managers, relying on low p/e and Graham & Dodd principles, search for underpriced securities of high quality in neglected areas of the market.

The asset mix Jan. 1 was 95% stocks and 5% cash.

Clients include Book of the Month Club, Gould Foundation, Handy & Harman and Telautograph.

Gerard O. Carret, executive vice president, is chief investment officer. Donald Carret, executive vice president, is client contact.

Cashman, Farrell and Associates

1285 Drummers Lane, Wayne, Pa. 19087; (215) 688-5900

Total assets managed	$996,000,000
Tax-exempt assets managed	$996,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	14
Types of accounts managed	CEG
No. of portfolio managers	2
Size of research staff	2

Cashman, Farrell and Associates is an equity manager that emphasizes low p/e and contrarian investing. The firm constructs a portfolio from stocks in the lower 40% of the p/e universe that have suffered significant price erosion and possess sound balance sheets.

The asset mix Jan. 1 was 50% stocks and 50% cash.

The firm netted $150 million in new tax-exempt assets in 1985. One new tax-exempt client was added.

Clients include Rockwell International, Boeing, Pacific Gas & Electric and GTE Corp.

Daniel V. Cashman, partner is chief investment officer. Gerald T. Hofmann, partner, is client contact.

Catanzarite Investment Advisors

10358 Artesia Blvd., Bellflower, Calif. 90706; (213) 920-9771

Total assets managed	$12,000,000
Tax-exempt assets managed	$10,000,000
Real estate assets managed	$2,000,000
Minimum separate account	$25,000
Tax-exempt clients	56
Types of accounts managed	CFJ
No. of portfolio managers	2
Size of research staff	2

Catanzarite Investment Advisors is a balanced manager. In equities, the firm stresses undervalued securities with an emphasis on low p/e and good dividend yield. Using interest rate anticipation, fixed-income portfolios are actively managed using corporate and government notes and bonds.

The tax-exempt asset mix Jan. 1 was 50% stocks, 20% bonds, 10% cash, 10% mortgage-backed securities and 10% real esiate limited partnership.

Bryant R. Manley, vice president and portfolio manager, is the chief investment officer and client contact.

C.B. International Investments Ltd.

11 Old Broad St., London, England EC2N 1BB; 0101-44-638-6000

Total assets managed	$10,000,000,000
Tax-exempt assets managed	$750,000,000
International assets managed	$20,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	4
Types of accounts managed	C
No. of portfolio managers	80

C.B. International Investments Ltd. is an international manager.

In equities, active international market allocation is implemented through passive stock selection, using market representative funds. Quantitative techniques are applied to control and monitor risks. Interest rate anticipation is used in its fixed-income approach.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 98% stocks and 2% cash.

The firm is a subsidiary of National Westminster Bank Group.

Christine Downton, chairman, is chief investment officer. Client contact is Margaret Waller, vice president-marketing, at (212) 248-0100.

Cedar Hill Associates Inc.

135 S. LaSalle St., Chicago, Ill. 60603; (312) 641-3161

Total assets managed	$46,000,000
Tax-exempt assets managed	$31,000,000
Minimum separate account	$500,000
Tax-exempt clients	4
Types of accounts managed	CG
No. of portfolio managers	2

Cedar Hill Associates Inc. is an equity and fixed-income manager.

Its equity approach is quantitative, accumulating undervalued issues and selling them when fairly valued.

In fixed income, the firm identifies cyclical turning points in the interest rate climate and alternates between long- and short-term maturities.

The asset mix Jan. 1 was 42% stocks, 2% bonds and 56% cash.

Clients include the Illinois Teachers' Retirement System.

Joel H. Jastromb, president, is chief investment officer and client contact.

Centerre Trust Co. of St. Louis

510 Locust St., St Louis, Mo. 63101; (314) 231-9300

Total assets managed	$6,338,000,000
Tax-exempt assets managed	$3,657,000,000
Real estate assets managed	$15,000,000
International assets managed	$103,000,000
401(k) and 457 assets managed	$56,000,000
Passive assets managed	$83,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	6

Centerre Trust Co. of St. Louis is an equity, fixed-income, balanced, real estate and international manager.

Dividend discount models are used in its equity approach. In fixed income, economic, credit, sector and interest rate analysis are used. Options also are used.

The real estate approach relies on broad diversification by combining the talents of individual outside managers with different locations and styles.

The asset mix Jan. 1 was 40.7% stocks, 40.5% bonds, 18.4% cash and 0.4% mortgages.

Clients include Union Electric, Olin, Air Canada and Squibb.

James B. McGuire, senior vice president, is chief investment officer. Richard W. Hibbs, vice president-director of employee benefit marketing, is client contact.

Certus Financial Corp.

4 Embarcadero, No. 2850, San Francisco, Calif. 94110; (415) 945-5445

Total assets managed	$300,000,000
Tax-exempt assets managed	$300,000,000
401(k) and 457 assets managed	$250,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	19
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	3

Certus Financial Corp. is a GIC consultant/manager. As of Jan. 1, all tax-exempt assets were in GICs.

In 1985 the firm had a net gain of $150 million in new tax-exempt business; 10 clients were added.

Clients include Bechtel, Arco, Sun Co. and Pennsylvania Power & Light.

Rosenberg Capital Management owns a majority interest in Certus.

David M. Perry is chief investment officer and client contact.

Chase Investment Counsel

300 Preston Ave., Suite 403, Charlottesville, Va. 22901; (804) 293-9104

Total assets managed	$224,000,000
Tax-exempt assets managed	$184,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	17
Types of accounts managed	CFJ
No. of portfolio managers	3
Size of research staff	1

Chase Investment Counsel Corp. is an equity and a balanced manager.

It uses growth stocks in its equity approach, preferring undervalued, low p/e stocks with good continuity and intermediate market capitalization.

In fixed income, the firm uses interest rate anticipation, typically concentrating on readily marketable, high-quality bonds with short maturities.

The asset mix Jan. 1 was 65% stocks, 7% bonds and 28% cash.

Derwood S. Chase Jr., president, is chief investment officer and client contact.

Chase Investors Management Corp.

1211 Avenue of the Americas, New York, N.Y. 10036; (212) 730-2967

Total assets managed	$18,100,000,000
Tax-exempt assets managed	$15,000,000,000
Real estate assets managed	$64,600,000
International assets managed	$2,148,000,000
Passive assets managed	$1,948,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	168
Types of accounts managed	CEFGJ
No. of portfolio managers	30

Chase Investors Management Corp. has equity, fixed-income, balanced, real estate, international, oil and gas, indexing and hedging capabilities.

Its equity approach includes passive, growth and emerging growth stocks, low p/e, sector rotation, Graham & Dodd, market timing and value.

Its active fixed-income approach emphasizes credit quality and marketability with interest rate forecasts and sector analysis as the primary basis for movement.

In real estate, Chase's emphasis is on institutional-quality properties, flexible investment structures and active management of portfolios.

The asset mix Jan. 1 was 17.1% stocks, 39.9% bonds, 37.2% cash, 0.4% equity real estate, 0.4% mortgage-backed securities and 5% oil and gas and international.

Clients include General Motors, General Foods, Boeing and AT&T.

The firm is a wholly owned subsidiary of Chase Manhattan Corp.

Stephen E. Canter, president, is chief investment officer. Michael E. Fisher, managing director-marketing, is the client contact.

Cheswick, Gillespie & Robinson Inc.

80 Field Point Road, Box 2220, Greenwich, Conn. 06836; (203) 629-2800

Total assets managed	$500,000,000
Tax-exempt assets managed	$280,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEF
No. of portfolio managers	3

Cheswick, Gillespie & Robinson Inc. is a balanced manager.

In equities, it stresses growth stocks and in fixed income, interest rate anticipation.

The partners are Richard R. Cheswick, president; Thomas H. Gillespie Jr., executive vice president; and Blake W. Robinson, vice president.

The Chicago Corp.

208 S. LaSalle St., Chicago, Ill. 60604; (312) 855-5985

Total assets managed	$525,000,000
Tax-exempt assets managed	$285,000,000
401(k) and 457 assets managed	$40,000,000
Minimum separate account	$500,000
Tax-exempt clients	80
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	7

The Chicago Corp. is an equity, fixed-income and balanced manager.

In equities, managers use stocks with six years of stable, above-average earnings growth, raising cash when appropriate.

In fixed income, the firm relies on interest rate anticipation, emphasizing when to own the bonds and not which bonds to own. The cash equivalent/bond ratio over an interest rate cycle can vary by 100%.

The asset mix Jan. 1 was 70% stocks, 23% bonds and 7% cash.

The firm had a net gain of $50 million in new tax-exempt business in 1985; 10 clients were added.

Clients include Structural Iron Workers, Ohio State endowment and Staley Continental.

Jon T. Ender, senior vice president, is chief investment officer. Client contact is Charles R. Klimkowski, vice president.

Chicago Title & Trust Co.

111 W. Washington St., Chicago, Ill. 60602; (312) 630-3343

Total assets managed	$2,000,000,000
Tax-exempt assets managed:	
Total	$850,000,000
Commingled accounts	$180,000,000
Separate accounts	$670,000,000
Real estate assets managed	$10,000,000
International assets managed	$40,000,000
401(k) and 457 assets managed	$35,000,000
Minimum separate account	$2,000,000
Tax-exempt clients:	
Commingled	85
Separate	95
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	2

Canadian investment managers ranked by tax-exempt assets

Rank	Managers	U.S. $ millions
1.	Corporate Investment Associates	4,600
2.	Beutel, Goodman & Co.	3,300
3.	Jarislowsky, Fraser & Co.	2,500
4.	Confed Investment Counselling	2,100
5.	Manufacturers Life Insurance	1,902
6.	Toronto Investment Management	1,700
7.	M.K. Wong & Associates	1,679
8.	Black, Galper & Heessels	1,533
9.	Sceptre Investment Counsel	1,531
10.	Mu-Cana Investment Counselling	1,325
11.	Knight, Bain, Seath & Holbrook Capital	1,134
12.	National Trust	1,100
13.	Guardian Ruggles Cryedale	1,033
14.	Canagex Placements	984
15.	Timmins & Associates	960
16.	Guaranty Trust Co. of Canada	924
17.	Great-West Life Assurance	910
18.	McLean, Budden	890
19.	E.J. McConnell & Associates	850
20.	Metropolitan Insurance Companies	638
21.	Montrusco Associates	540
22.	Laketown Investment Management	450
23.	Aetna Capital Management	436
24.	Elliott & Page	405
25.	Hodgson Roberton Laing	347
26.	Prudential Assurance	325
27.	Reed Monahan Nicholishen	325
28.	Investors Group Trust	300
29.	Fiscal Consultants	200
30.	Yield Management Group	182
31.	Foyston, Gordon & Payne	126
32.	Elliott & Page Atlantic	90
33.	Penreal Advisors	76
34.	Bisset & Associates	70
35.	Hughes, King & Co.	52
36.	Mawer & Associates	12
37.	Horgen Investment Counsel	10
38.	Yorkshire Trust	10
39.	Loucks, Lee & Associates	5
40.	Guardian Timing Services	1
	TOTAL	36,656

Chicago Title & Trust Co. is an equity, fixed-income and balanced manager.

It takes a value approach to stock and bond investments, relying on Graham & Dodd for equities and using active management of bonds.

The tax-exempt asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

Sixty percent of research is generated internally, with 75 stocks followed closely and 200, generally.

A. Vincent Agnew Jr., senior vice president, is chief investment officer. Client contact is Robert Krogman, vice president.

Donald P. Chiras

2510 N.W. 23rd Ave., Gainesville, Fla. 32605; (904) 378-8774

Total assets managed	$54,000,000
Tax-exempt assets managed	$54,000,000
International assets managed	$3,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	3
Types of accounts managed	EG
No. of portfolio managers	1
Size of research staff	1

Donald P. Chiras is an equity and fixed-income manager.

The equity approach emphasizes quantitative and Graham & Dodd principles.

In fixed income, the firm is a controlled risk manager investing in short- to intermediate-term bonds.

The asset mix Jan. 1 was 33% stocks and 67% bonds.

Clients include the University of Florida Foundation and the city of Gainesville.

Donald P. Chiras, full proprietor, is chief investment officer and client contact.

Chittenden Bank Trust & Investment Division

2 Burlington Square, Burlington, Vt. 05401; (802) 658-4000

Total assets managed	$457,000,000
Tax-exempt assets managed:	
Total	$183,000,000
Commingled accounts	$6,000,000
Separate accounts	$177,000,000
Real estate assets managed	$19,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$250,000
Tax-exempt clients:	
Commingled	165
Separate	254
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	1

Chittenden Bank Trust & Investment Division is an equity, fixed-income and balanced manager. A quantitative approach is used as a screen for equities, with subsequent research confirming or rejecting the result. Interest rate anticipation is the basis of its fixed-income approach.

The mix of tax-exempt assets Jan. 1 was 50% stocks, 30% bonds, 10% cash and 10% mortgage-backed securities.

Robert A. Bose, vice president, is chief investment officer. William T. Fellows, assistant vice president, is client contact.

Churchill Management Corp.

5900 Wilshire Blvd., Los Angeles, Calif. 90036; (213) 937-7110

Total assets managed	$120,000,000
Tax-exempt assets managed	$75,000,000
Real estate assets managed	$9,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	56
Types of accounts managed	CJ
No. of portfolio managers	3
Size of research staff	4

Churchill Management Corp. is a balanced manager.

For equities, it invests in undervalued stocks in companies with proven growth formulas.

Fixed-income investments are based on maturity, quality and other characteristics. The exact mix is determined by intermediate-term interest rate forecasts.

As of Jan. 1, the asset mix of tax-exempt assets was 30% stocks, 45% bonds, 17% cash, 4% real estate and 4% mortgages.

Fred A. Fern, president, is chief investment officer. Steven P. Mann, director of client services, is client contact.

CIGNA Corp.

Hartford, Conn. 06152; (203) 726-6000

Total assets managed	$39,000,000,000
Tax-exempt assets managed:	
Total	$18,000,000,000
Pooled accounts	$3,800,000,000
Separate accounts	$1,400,000,000
Real estate assets managed	$864,000,000
International assets managed	$66,000,000
401(k) and 457 assets managed	$1,000,000,000
GICs	$1,800,000,000
Annuities	$767,000,000
Other	$10,200,000,000
Minimum separate account	$10,000,000
Types of accounts managed	CEFG
No. of portfolio managers	21
Size of research staff	15

CIGNA Corp. offers equity, fixed-income, balanced, real estate and international capabilities.

In equities, the firm's value-oriented philosophy uses a rigorous and systematic valuation system to select stocks priced at a significant discount to their intrinsic value, based on an analysis of underlying earning power and cash flow.

In fixed income, the approach places primary emphasis on cyclical interest rate anticipation based on fundamental analysis of economic and business cycle trends.

The real estate approach uses top-down portfolio management, employs a nationwide correspondent network and invests in moderate-sized, quality producing properties outside major cities. Asset management is conducted within a disciplined framework, emphasizing intensive property management.

The asset mix Jan. 1 was 35.7% stocks, 30.4% bonds, 17.1% cash and 16.8% equity real estate.

Clients include United Technologies, Connecticut, Kellogg and Warner Lambert.

The firm is affiliated with CIGNA Asset Advisers, CIGNA Investments and Connecticut General Life.

Chief investment officer is Richard W. Maine. Client contacts are Stephen H. Matheson, president, and Thomas R. John, vice president, of CIGNA Asset Advisers Inc.

CIMG Inc.

P.O. Box 17500, Milwaukee, Wis. 53217; (414) 241-4569

Total assets managed	$171,000,000
Tax-exempt assets managed	$75,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$500,000
Tax-exempt clients	26
Types of accounts managed	C
No. of portfolio managers	3

CIMG Inc. is a balanced manager.

Its equity approach concentrates on stocks and market sectors with accelerating earnings and sales fundamentals.

For fixed income, the firm uses monetary, economic and technical variables to value investments in government and agency issues.

The Jan. 1 tax-exempt asset mix was 60% stocks, 38% bonds and 2% cash.

In 1985, the firm realized a net gain of $12.3 million in new tax-exempt business; 18 clients were added.

Louis T. Chambers, president, is chief investment officer and client contact.

Citicorp Investment Management Inc.

153 E. 53rd St., New York, N.Y. 10014; (212) 559-9700

Total assets managed	$23,917,000,000
Tax-exempt assets managed	$17,938,000,000
Real estate assets managed	$814,000,000
International assets managed	$332,000,000
401(k) and 457 assets managed	$507,000,000
Passive assets managed	$545,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	378
Types of accounts managed	CEFGJ
No. of portfolio managers	31
Size of research staff	22

Citicorp Investment Management Inc. offers equity, fixed income, balanced, real estate and international manager capabilities.

Its equity philosophy is growth oriented, selecting companies with forecasted earnings 50% greater than the market. Equal emphasis is placed on fundamental research, quantitative and valuation models in arriving at bottom-up input.

Interest rate judgments are the basis for active maturity decisions in fixed income. Incremental return is added by evaluation of price differentials between sectors and individual securities. The approach is achieved through a broad spectrum of specialized market disciplines defined by maturity ranges, quality ratings and specialized security types.

In real estate, the emphasis is on acquiring prime income-producing properties in major metropolitan areas.

The tax-exempt asset mix Jan. 1 was 47% stocks, 31% bonds, 18% cash, 3% equity real estate and 1% mortgages.

Robert G. Wade Jr. is chief investment officer and client contact.

Citizens Fidelity Bank & Trust Co.

Citizens Plaza, Louisville, Ky. 40207; (502) 581-2230

Total assets managed	$1,800,000,000
Tax-exempt assets managed:	
Total	$580,000,000
Commingled accounts	$80,000,000
Separate accounts	$500,000,000
International assets managed	$1,000,000
Tax-exempt clients:	
Commingled	250
Separate	225
Types of accounts managed	CEFG
No. of portfolio managers	13
Size of research staff	5

Citizens Fidelity Bank & Trust Co. is an equity, fixed-income and balanced manager. The bank uses a value-oriented equity approach that concentrates research in industries and companies. The firm limits fixed-income maturities to an intermediate term structure.

The mix of tax-exempt assets Jan. 1 was 55% stocks and 45% bonds.

Clients include Louisville Courier-Journal, Hillerich & Bradsby, Louisville Gas & Electric and Citizens Fidelity.

The bank follows 65 stocks closely and 150, generally; 45% of research is generated in-house.

Ronald J. Murphy, senior vice president, is chief investment officer. Client contact is James P. Johannsen, vice president.

Clifford Associates

301 E. Colorado Blvd., Suite 510, Pasadena, Calif. 91101; (818) 792-2228

Total assets managed	$80,000,000
Tax-exempt assets managed	$5,000,000
Minimum separate account	$250,000
Tax-exempt clients	3
Types of accounts managed	CE
No. of portfolio managers	4
Size of research staff	4

Clifford Associates, a balanced manager, takes a quality-oriented equity approach combining growth stock, low p/e and Graham & Dodd techniques. Options are used.

In fixed income, it uses interest rate anticipation, generally investing in instruments with maturities of three years or less.

As of Jan. 1, the tax-exempt asset mix was 80% stocks, 15% bonds and 5% cash.

John G. Frisz is chief investment officer and A.M. Clifford II is the client contact.

Clutinger, Williams & Verhoye Inc.

1200 Third Ave., Suite 920, San Diego, Calif. 92101; (619) 231-2701

Total assets managed	$72,000,000
Tax-exempt assets managed	$50,000,000
Real estate assets managed	$1,000,000
401(k) and 457 assets managed	$4,000,000
Minimum separate account	$200,000
Tax-exempt clients	53
Types of accounts managed	CF
No. of portfolio managers	3
Size of research staff	3

Clutinger, Williams & Verhoye Inc., primarily an equity manager, takes a top-down, sector analysis approach with an emphasis on logic for product or service growth, financial strength and a tendency toward low p/e stocks.

In fixed income, its major emphasis is on economic and political influences on the interest rate outlook.

Its Jan. 1 tax-exempt asset mix was 70% stocks, 23% bonds, 6% cash and 1% mortgage-backed securities.

Thomas H. Clutinger, Louis E. Williams Jr. and Karl E. Verhoye are chief investment officers and client contacts.

CMB Investment Counselors

1880 Century Park East, Suite 600, Los Angeles, Calif. 90067; (213) 557-1500

Total assets managed	$3,256,000,000
Tax-exempt assets managed	$2,570,000,000
Real estate assets managed	$1,491,000,000
Passive assets managed	$6,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	24
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	4

CMB Investment Counselors offers equity, fixed-income and balanced management.

Its equity approach uses low p/e and sector rotation and emphasizes quality, value and operating momentum in stock selection.

In fixed income, it seeks to identify undervalued sectors and uses a concentrated approach to sector emphasis. Mortgage pass-throughs are of major interest.

The tax-exempt asset mix Jan. 1 was 16% stocks, 19% bonds, 7% cash and 58% mortgage-backed securities.

In 1985, the firm suffered a net loss of $266 million in tax-exempt business.

The firm follows about 50 stocks closely and 200 generally; one-third of research is generated internally.

Clients include Los Angeles County Employees, Illinois Teachers, Amoco and PacTel

The firm is an independently managed subsidiary of First National Bank of Minneapolis.

Thomas J. Steffanci, executive vice president, is chief investment officer and client contact.

CM&M Asset Management

1613 Spruce St., Philadelphia, Pa. 19103; (215) 546-8212

Total assets managed	$136,000,000
Tax-exempt assets managed	$136,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts managed	CG
No. of portfolio managers	2
Size of research staff	3

CM&M Asset Management Co. is a fixed-income manager.

The firm's core/active investment philosophy offers a risk averse client an active, yet disciplined, alternative designed to exceed objectives while limiting the portfolio's volatility.

The tax-exempt asset mix Jan. 1 was 95% bonds and 5% cash.

CM&M is a majority-owned subsidiary of Marine Midland Banks Inc.

Clients include AMAX, United Presbyterian Church, Kerr McGee and Fuqua Industries.

Anthony J. Basile, executive vice president, is chief investment officer and client contact.

Cole, Yeager & Wood

630 Fifth Ave., New York, N.Y. 10111; (212) 765-5350

Total assets managed	$1,300,000,000
Tax-exempt assets managed	$1,130,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	22
Types of accounts managed	CEF
No. of portfolio managers	4

Cole, Yeager & Wood is an equity manager that bases its investment approach on growth stock. The firm invests in companies both large and small that have achieved dominant positions in growth markets.

The asset mix Jan. 1 was 97% stocks and 3% cash.

In 1985, the firm had a net gain of $31 million in new tax-exempt business; two clients were added.

Eighty-five percent of research is

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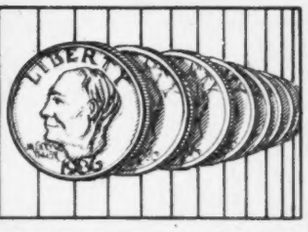
mpt associates

630 Fifth Avenue, New York, NY 10111 (212) 247-5858



generated internally; 50 to 60 stocks are watched closely and 70 to 100, generally.

Clients include the Kaiser Foundation Health Plan, Cincinnati Bell, Corning Glass and IBM.

B. Robert Wood, executive vice president, is chief investment officer. Client contact is George M. Yeager, president.

Colorado National Bank of Denver

Box 5168, Denver, Colo. 80217; (303) 893-1862

Total assets managed	$800,000,000
Tax-exempt assets managed:	
Total	$400,000,000
Commingled accounts	$60,000,000
Separate accounts	$340,000,000
Minimum separate account	$2,000,000
Tax-exempt clients:	
Commingled	300
Separate	20
Types of accounts managed	CEFGJ
No. of portfolio managers	7

Colorado National Bank of Denver is an equity, fixed-income and balanced manager. The bank's equity approach is Graham & Dodd based.

Its fixed-income approach relies on maturity switches, arbitrage and high turnover.

The Jan. 1 tax-exempt asset was 60% stocks, 35% bonds and 15% cash.

Eighty percent of research is generated internally, with 100 stocks followed closely and 1,000, generally.

Clients include Shriners Hospital and Colorado Community Foundation.

Chief investment officer is Robert J. Alder, vice president. Coleman R. Robinson, assistant vice president, is client contact.

Columbia Management Co.

1300 S.W. Sixth Ave. P.O. Box 1350, Portland, Ore. 97207; (503) 222-3600

Total assets managed	$4,397,000,000
Tax-exempt assets managed	$3,332,000,000
401(k) and 457 assets managed	$53,000,000
Passive assets managed	$68,000,000
Number of tax-exempt clients	58
Types of accounts managed	CEFGJ
No. of portfolio managers	10

Columbia Management Co. is an equity, fixed-income and balanced manager.

In equities, the firm uses a top-down, rotating-emphasis investment philosophy. Analysis of the overall investment environment provides the basis for decision-making. This combination provides the basis for weighting shifts between market sectors.

Its fixed-income objectives are to maximize return, avoid credit risk and avoid price volatility. Portfolios are structured to emphasize mortgage pass-throughs and active management.

The tax-exempt asset mix Jan. 1 was 69% stocks, 24% bonds and 7% cash.

In 1985, the firm had a net gain of $143 million in new tax-exempt business; five clients were added.

Three-fourths of the research is generated in-house, with 300 stocks followed closely and 1,500, generally.

Clients include Oregon State, Bechtel, Blue Cross of California and the Richard K. Mellon Foundation.

James F. Rippey, president, is chief investment officer. Client contact is Chad L. Fleischman, marketing and client administration.

Columbus Circle Investors

15 Columbus Circle, New York, N.Y. 10023; (212) 397-8760

Total assets managed	$525,000,000
Tax-exempt assets managed	$410,000,000
Passive assets managed	$130,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	12
Types of accounts managed	CFJ
No. of portfolio managers	3
Size of research staff	4

Columbus Circle Investors Inc. is an equity, balanced and fixed-income manager.

In equities, it focuses on changes affecting consensus expectations for variables unique to each investment. Sector rotation is emphasized. Options are used.

In fixed income, the firm takes a conservative approach, shifting emphasis among maturity, quality and issuer sectors as economic and market conditions dictate.

The tax-exempt asset mix Jan. 1 was 34% stocks, 55% bonds and 11% cash.

The firm had a net gain of $45 million in new tax-exempt business in 1985; five clients were added.

The firm is a wholly owned subsidiary of Thomson McKinnon Asset Management.

Client contacts are Winthrop Headley in New York and Robert Fehrmann in Chicago.

Comerica Bank — Detroit

Detroit, Mich. 48275-1034; (313) 222-5043

Total assets managed	$5,347,000,000
Tax-exempt assets managed:	
Total	$1,500,000,000
Commingled accounts	$585,000,000
Separate accounts	$915,000,000
Real estate assets managed	$11,000,000
401(k) and 457 assets managed	$16,000,000
Passive assets managed	$80,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	1,500
Separate	50
Types of accounts managed	CEFGJ
No. of portfolio managers	19
Size of research staff	4

Comerica Bank is an equity, fixed-income, balanced, real estate and international manager.

The bank tries to buy companies with above-average profitability, growth prospects and market multiples. Options are used.

The fixed-income approach relies on interest rate anticipation, sector analysis, yield curve, quality analysis and foreign bonds. A multiple approach is used with emphasis on those approaches where the spread is the greatest.

For real estate, it buys high-quality, income-oriented properties.

The mix of tax-exempt assets Jan. 1 was 50% stocks, 45% bonds, 4% cash and 1% mortgage-backed securities.

Fifteen percent of research is generated internally, with 125 stocks followed closely and 6,000, generally.

Manown Kisor Jr., executive vice president, is chief investment officer.

Commerce Bank of Kansas City

P.O. Box 248, Kansas City, Mo. 64141; (816) 234-2000

Total assets managed	$938,000,000
Tax-exempt assets managed:	
Total	$289,000,000
Commingled accounts	$138,000,000
Separate accounts	$151,000,000
401(k) and 457 assets managed	$33,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEFJ
No. of portfolio managers	11

Commerce Bank of Kansas City is an equity, fixed-income, balanced and guaranteed investment contract manager.

The firm's equity approach is based on sector rotation and market timing.

Its fixed-income approach is based on interest rate anticipation; it also moves funds to attractive sectors based on spread analysis.

The mix of tax-exempt assets Jan. 1 was 50% stocks, 35% bonds and 15% cash.

Ten percent of research is generated internally, with 300 stocks followed closely and 500, generally.

Clients include Farmland Industries, Black & Veatch, Cook Paint and Panhandle Eastern.

George Wood, senior vice president, is chief investment officer. Steve Swett, senior vice president, is client contact.

Middle-market spotlight: May 26.

Commerce Bank of St. Louis

8000 Forsyth, St. Louis, Mo. 63105; (314) 854-7328

Total assets managed	$625,000,000
Tax-exempt assets managed:	
Total	$260,000,000
Commingled accounts	$27,000,000
Separate accounts	$233,000,000
401(k) and 457 assets managed	$4,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	156
Separate	297
Types of accounts managed	CEFGJ
No. of portfolio managers	5

Commerce Bank of St. Louis is an equity, fixed-income and balanced manager. Its equity approach emphasizes growth stocks and market timing. Its fixed-income approach uses interest rate anticipation.

The mix of tax-exempt assets Jan. 1 was 40% stocks, 55% bonds and 5% cash.

Seventy-five stocks are followed closely and 350, generally.

Clients include Clayton (Mo.), Overland (Mo.), Sisters of Mercy and Enterprise Leasing.

Chief investment officer is Carl C. Enloe, senior vice president-investments. Client contact is Richard E. Drummond, senior vice president-marketing.

Commerce Investment Management Inc.

850 NBC Center, Lincoln, Neb. 68508; (402) 474-4383

Total assets managed	$72,000,000
Tax-exempt assets managed	$38,000,000
401(k) and 457 assets managed	$25,000,000
Minimum separate account	$250,000
Tax-exempt clients	9
Types of accounts managed	CEFG
No. of portfolio managers	2

Commerce Investment Management Inc., primarily an equity manager, uses a modified top-down approach to select sectors. Projected earnings growth in relation to p/e is used to evaluate the most attractive companies. Options and stock index futures are used. In fixed income, maturities are adjusted in anticipation of interest rate levels, concentrating in attractive sectors.

The tax-exempt asset mix Jan. 1 was 90% stocks, 5% bonds and 5% cash. The firm had a net gain of $29 million in new tax-exempt business in 1985.

Gaytan C. Abood, president, is chief investment officer and client contact.

Commodity Management Service Corp.

327 S. LaSalle St., No. 800, Chicago, Ill. 60604; (312) 922-3662

Total assets managed	$1,000,000
Tax-exempt assets managed	$0
Minimum separate account	$75,000
No. of portfolio managers	1
Size of research staff	4

Commodity Management Service Corp. is a futures manager whose technical approach uses computer-based trend indicators and statistical pattern recognition.

The firm is an affiliate of Cisco Research Group.

Donald L. Jones, president, is chief investment officer. Client contact is Roger A. Lofstrand, marketing director.

Composite Research & Management Co.

1111 Third Ave., Suite 1080, Seattle, Wash. 98101; (206) 464-8400

Total assets managed	$630,000,000
Tax-exempt assets managed	$40,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	17
Types of accounts managed	C
No. of portfolio managers	4
Size of research staff	2

Composite Research & Management Co. is a balanced manager.

In equities, it emphasizes low p/e. Fundamental analysis focuses on balance sheets, income statements and cash flows in the search for quality businesses at cheap prices.

In fixed income, emphasis is on maturity/duration management, quality selection and technical analysis to take advantage of short-term trading opportunities.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The firm experienced a net gain in tax-exempt business in 1985 of $16 million; four clients were added.

Its parent is Washington Mutual Financial Group, which has $670 million in assets.

Craig Hobbs, vice president, is chief investment officer. Client contact is Don Dysart, vice president.

Computime Institutional Services Inc.

26 W. Ninth St., New York, N.Y. 10011; (212) 777-9494

Total assets managed	$3,000,000
Tax-exempt assets managed	$3,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	5

Computime Institutional Services Inc. is an equity manager that relies on sector rotation to aggressive or defensive stocks based on a market-timing model. Specific industry and stock selections are based on proprietary quantitative ranking systems. Options and stock index futures are used.

All tax-exempt assets were in stocks as of Jan. 1.

The firm follows all listed stocks closely and generates 100% of its research in-house.

David M. Levin, president, is chief investment officer and client contact.

Concord Capital Management

111 W. Jackson Blvd., Chicago, Ill. 60604; (312) 461-9211

Total assets managed	$1,255,000,000
Tax-exempt assets managed	$1,255,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	23
Types of accounts managed	CEFGJ
Size of research staff	4

Concord Capital Management is an equity manager that relies on sector rotation in its investment approach. Managers develop themes and identify groups of stocks they believe are undervalued.

The tax-exempt asset mix Jan. 1 was 96% stocks and 4% cash.

The firm had a net gain of $492 million in new tax-exempt business in 1985; 10 clients were added.

It follows 50 stocks closely and 100 generally; 85% of the research is generated internally.

Clients include Ameritech, Burroughs, Ford and IBM.

Harold L. Arbit, president, is chief investment officer. Client contact is Edward D. Matz Jr., senior vice president.

Confed Investment Counselling Ltd.

321 Bloor St. E., Toronto, Ontario M4W 1H1; (416) 967-8056

Total assets managed	$2,100,000,000 (U.S.)
Tax-exempt assets managed	$2,100,000,000
Real estate assets managed	$72,000,000
International assets managed	$1,000,000
Minimum separate account	$2,400,000
Tax-exempt clients	359
Types of accounts managed	CPU
No. of portfolio managers	6
Size of research staff	14

Confed Investment Counselling Ltd., a Canadian firm, is an equity, fixed-income, balanced and real estate manager.

Using Graham & Dodd analysis in its equity approach, the firm concentrates on shares of companies with high sustainable return on equity produced by asset turnovers and margins.

Interest rate anticipation and trading are the cornerstones of the firm's fixed-income approach. The firm holds real estate portfolios of non-residential, income-producing properties diversified by location and type.

The asset mix Jan. 1 was 28% Canadian stocks, 51% bonds, 4% cash, 6% equity real estate and 11% U.S. stocks.

Seventy percent of the firm's research is generated in-house, with 250 stocks followed closely and 325, generally.

John H. Watson, vice president-investments, is chief investment officer. Client contact is F.G. Ryan, assistant vice president-group pension marketing.

Connecticut Mutual Life Insurance Co.

140 Garden St., Hartford, Conn. 06154; (203) 727-6500

Total assets managed	$8,355,000,000
Tax-exempt assets managed:	
Total	$1,799,000,000
Pooled accounts	$199,000,000
Separate accounts	$163,000,000
Real estate assets managed	$24,000,000
GICs	$1,035,000,000
Other	$402,000,000
Indexed/dedicated assets	11,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CEJ
No. of portfolio managers	4
Size of research staff	1

Connecticut Mutual Life Insurance Co. offers equity, fixed-income and real estate capabilities.

Using a rotational equity strategy, the firm carefully reads market conditions. Specific industry and sector positions are attained after economic analysis and a fundamental analysis of individual stocks.

In fixed income, the insurer carefully examines anticipated interest rate changes while performing analysis of sectors and individual issues.

The insurer has $11 million in dedicated or immunized portfolios.

In real estate, the objective is to provide optimal long-term return from properties acquired, managed and sold, consistent with standards for quality, income growth and appreciation potential.

The asset mix Jan. 1 was 60% stocks, 20% bonds, 10% cash and 10% equity real estate.

Clients include Ford, Stanhome, Ball Corp. and The Dexter Corp.

The firm is affiliated with Solomon Asset Management Inc. and Westwood Management Corp.

Robert E. Stevens, executive vice president, is chief investment officer. Client contact is Gary Lineberry, vice president-group pensions.

Connecticut National Bank

777 Main St., Hartford, Conn. 06115; (203) 728-2000

Total assets managed	$5,962,000,000
Tax-exempt assets managed:	
Total	$2,230,000,000
Commingled accounts	$412,000,000
Separate accounts	$1,818,000,000
401(k) and 457 assets managed	$125,000,000
Passive assets managed	$23,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	1,044
Separate	450
Types of accounts managed	CEFGJ
No. of portfolio managers	17
Size of research staff	9

Connecticut National Bank is an equity, fixed-income and balanced manager.

Managers use growth stock and emerging growth and take a fundamental equity approach based on analysis and research on specific industries and companies. A number of valuation techniques are used to determine price.

In fixed income, emphasis is placed on broad trends in interest rates and, where appropriate, positioning along the yield curve relative to the projected interest rate moves.

The mix of tax-exempt assets as of Jan. 1 was 57% stocks, 35% bonds and 8% cash.

Eighty percent of research is generated internally with 275 stocks followed closely and 350, generally.

Chief investment officer is Rudolph Abel Jr., senior vice president. Client contact is Stuart Repp, senior vice president.

Connors Investor Services

1817 Bernville Road, Reading, Pa. 19601; (215) 376-7418

Total assets managed	$80,000,000
Tax-exempt assets managed	$51,000,000
Minimum separate account	$250,000
Tax-exempt clients	51
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	1

Connors Investor Services Inc. is an equity manager that makes extensive use of hedging strategies. It emphasizes low p/e and emerging growth

stocks, using two equity oriented strategies: option hedging of listed stocks; and investment in small companies.

It takes a passive approach to fixed income.

The tax-exempt asset mix Jan. 1 was 80% stocks, 5% bonds and 15% cash.

The firm had a net loss in tax-exempt business of $58 million; 21 clients were added.

Thomas W. Weik, vice president, is chief investment officer; Ronald H. Seher, vice president, is client contact.

Constitution Capital Management

1 State St., Hartford, Conn. 06103; (203) 280-3912

Total assets managed	$2,645,000,000
Tax-exempt assets managed:	
Total	$2,367,000,000
Commingled accounts	$609,000,000
Separate accounts	$1,758,000,000
Passive assets managed	$20,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Separate	280
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	8

Constitution Capital Management is an equity, fixed-income, balanced and a covered options manager.

The equity approach has a growth stock bias, but uses fundamental analysis to develop strategic investment themes to capitalize on market inefficiencies. It also has a Valuepath disciplined approach, which is based on a composite ranking of a series of valuation models and a set of strict trading rules.

The fixed-income approach is risk/reward. The Index-Plus strategy is developed from empirical evidence that demonstrates that a fully invested portfolio, which avoids market timing, can produce superior absolute and relative returns.

The mix of tax-exempt assets Jan. 1 was 50% stocks, 41% bonds and 9% cash.

Constitution Capital Investment merged in January with Beacon Assets, a subsidiary of Bank of New England.

Clients include United Technologies, Middlesex County and Hartford Municipal.

Chief investment officer is John Anderson, chief executive officer. Client contacts are Ellsworth Davis (Hartford, Conn.) and Joyce Braude (Boston, Mass.).

The directory of real estate advisers will appear Sept. 15.

Continental Assurance Co.

CNA Plaza, Chicago, Ill. 60685; (312) 822-5000

Total assets managed	$5,436,000,000
Tax-exempt assets managed:	
Total	$2,896,000,000
Pooled accounts	2,180,000,000
GICs	$1,269,000,000
Annuities	$87,000,000
Other	$1,328,000,000
Types of accounts managed	CEGJ
No. of portfolio managers	4
Size of research staff	6

Continental Assurance Co. offers equity and fixed-income capabilities.

In equities, the firm emphasizes long-term growth and security of principal. In fixed income, managers buy and hold bonds while immunizing a portion of the portfolio.

The asset mix Jan. 1 was 6.1% stocks, 93.3% bonds and 0.6% cash.

Clients include Texaco, ABC, Walgreens and Chevron.

Chief investment officer is Donald Rycroft, treasurer. Client contact is Ralph Vuono, national sales director, at (212) 306-8637.

Continental Illinois National Bank & Trust Co.

30 N. LaSalle St., Chicago, Ill. 60693; (312) 828-7007

Total assets managed	$1,807,000,000
Tax-exempt assets managed:	
Total	$1,807,000,000
Commingled accounts	$79,000,000
Separate accounts	$1,728,000,000
401(k) and 457 assets managed	$59,000,000
Passive assets managed	$44,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	31
Separate	72
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	1

Continental Illinois National Bank & Trust Co. handles equity and balanced accounts.

In equities, managers take a value-oriented approach with a yield hurdle. Low p/e is emphasized.

The bank takes a passive fixed-income approach, managing the relative interest rate risk exposure by relating the portfolio's duration to the duration of the market, limiting dependence on interest rate anticipation.

The Jan. 1 asset mix was 33% stocks, 49% bonds and 18% cash.

Half of the research is generated internally, with 70 stocks followed closely and 400, generally.

Clients include Cook County, Plumbers Pension, Moorman Manufacturing and Shelby Williams.

William L. Gunlicks, executive vice president, is chief investment officer. Raymond O. Wicklander, vice president, is client contact.

25 largest managers of 401(k)/457 plan assets

Rank	Managers	$ millions
1.	Aetna Life and Casualty	3,389
2.	Bankers Trust-Investment Management Group	2,251
3.	Fidelity Investments	2,200
4.	State Street Bank & Trust	1,995
5.	Travelers Companies	1,500
6.	Nationwide Insurance Companies	1,386
7.	Provident National Assurance	1,250
8.	Wells Fargo Investment Advisors	1,220
9.	CIGNA	1,000
10.	AmeriTrust	800
11.	MONY Financial Services	750
12.	Vanguard Group of Investment Companies	748
13.	RepublicBank, Dallas	715
14.	Bankers Life	700
15.	Citicorp Investment Management	507
16.	PRIMCO Capital Management	420
17.	Bank of Oklahoma, Tulsa	400
18.	First Security Investment Management	300
19.	Capital Guardian Trust	290
20.	Certus Financial	250
21.	First Trust	250
22.	T. Rowe Price Associates	227
23.	Frank Russell Trust	210
24.	Eaton Vance Management	200
25.	InterFirst Investment Management	200
	TOTAL	**23,158**

Cooke & Bieler Inc.

1435 Walnut St., Philadelphia, Pa. 19102; (215) 567-1101

Total assets managed	$1,946,000,000
Tax-exempt assets managed	$1,702,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	66
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	6

Cooke & Bieler Inc. is an equity, fixed-income and balanced manager.

In equities, it emphasizes low-risk growth. Portfolios have higher than market yields and return on equity, lower than market betas and balance sheets.

In fixed income, the firm uses interest rate anticipation and emphasizes credit analysis and a structured maturity.

The asset mix Jan. 1 was 74% stocks, 9% bonds and 17% cash.

The firm had a net gain of $147 million in new tax-exempt business in 1985; 11 clients were added.

Eighty percent of the research is generated internally, with 70 stocks followed closely and 250, generally.

Clients include Hercules, Columbia Gas, Ironworkers of Southern Ohio and Snap-On Tools.

Russell Redenbaugh is chief investment officer; client contact is Robert T. Brooks.

Copley Real Estate Advisors

535 Boylston St., Boston, Mass. 02116; (617) 578-4900

Total assets managed	$5,300,000,000
Tax-exempt assets managed	$3,500,000,000
Real estate assets managed	$3,500,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	120
Types of accounts managed	CEGJ
No. of portfolio managers	3

Copley Real Estate Advisors Inc., a real estate manager, invests in developmental real estate on a joint venture basis with local developer partners.

All tax-exempt assets were invested in equity real estate as of Jan. 1.

The firm experienced a net gain in new tax-exempt business in 1985 of $320 million; 40 clients were added.

Clients include AT&T and the Boilermaker and Blacksmith National Pension Fund.

The firm is an affiliate of The New England Mutual Life Insurance Co., whose assets under management total $29.379 billion. Of that, $20.867 billion are tax-exempt.

Joseph W. O'Connor, principal, is chief investment officer. Client contact is John C. Phillips Jr., principal.

Copper Beech Capital Services

74 W. Park Place, Stamford, Conn. 06901; (203) 323-6001

Total assets managed	$6,000,000
Tax-exempt assets managed	$6,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Copper Beech Capital Services is an investment supervisor for equity and fixed-income funds.

Equity funds blend growth and value styles in portfolios; fixed-income funds blend maturities to complement each other.

The tax-exempt asset mix Jan. 1 was 93% stocks and 7% cash.

The firm had a net gain of $5 million in new tax-exempt business in 1985; one client was added.

William P. Marshall, president, is chief investment officer. Client contact is Eugene J. Murphy, vice president-business development.

Corbyn Associates Inc.

Suite 330, The Quadrangle, Village of Cross Keys, Baltimore, Md. 21210; (301) 532-8600

Total assets managed	$132,000,000
Tax-exempt assets managed	$90,000,000
Minimum separate account	$100,000
Tax-exempt clients	174
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	3

Corbyn Associates Inc. is a balanced, equity-oriented manager that emphasizes low p/e, Graham & Dodd and modified contrary opinion in its approach.

The asset mix Jan. 1 was 30% stocks, 40% bonds and 30% cash.

The firm experienced a $2 million net loss in tax-exempt business in 1985; 11 clients were added.

Clients include St. Joseph Hospital, Greater Baltimore Medical Center, Bon Secours Hospital and French Construction Services.

Daniel R. Long III, president, is chief investment officer. Richard Hynson Jr., vice president, is the client contact.

CoreStates Investment Advisers

Broad & Chestnut Streets, Philadelphia, Pa. 19101; (215) 629-3100

Total assets managed	$5,145,000,000
Tax-exempt assets managed:	
Total	$1,040,000,000
Commingled accounts	$294,000,000
Separate accounts	$746,000,000
Real estate assets managed	$2,000,000
International assets managed	$21,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	12

CoreStates Investment Advisers is an equity, fixed-income, balanced and international manager.

The equity approach seeks long-term capital appreciation through active management of predominantly small to medium-size capital growth stocks.

The fixed-income approach, which is sector analysis based, relies on active management to dampen volatility and maximize returns.

The tax-exempt asset mix Jan. 1 was 20% stocks, 70% bonds and 10% cash.

Seventy percent of research is generated internally, with 150 stocks followed closely and 200, generally.

CoreStates is an investment subsidiary of Philadelphia National Bank.

Chief investment officer is Paul G. Finegan, executive vice president. Client contact is Donald F. Carey, vice president.

Corporate Investment Associates

P.O. Box 7500, Station A, Toronto, Ontario M5W 1P9; (416) 867-2432

Total assets managed	$4,600,000,000(U.S.)
Tax-exempt assets managed:	
Total	$4,600,000,000
For subsidiaries of U.S. firms	$2,500,000,000
Real estate assets managed	$1,345,000,000
International assets managed	$140,000,000
Minimum separate account	$3,000,000
Tax-exempt clients:	
Total	505
U.S. subsidiaries	173
Types of accounts managed	CEFPU
No. of portfolio managers	5
Size of research staff	7

Corporate Investment Associates is an equity, fixed-income, balanced, real estate and direct energy Canadian manager.

Its equity approach emphasizes fundamental value analysis and uses sector rotation for sector weightings.

It relies on a wide range of valuation tools and actively trades within its duration strategy in fixed income.

In real estate, it concentrates on income-producing, prime commercial properties that will provide long-term real returns.

The asset mix Jan. 1 was 36% Canadian stocks, 34% bonds, 5%

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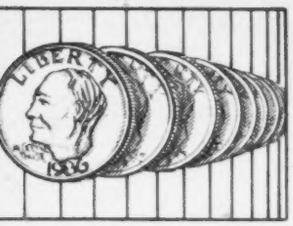

uity real estate, 5% offshore equity, % mortgages, 5% U.S. stocks and % direct energy.
The firm's parent is Royal Trust.
Clients include Alcan, IBM and Gen- al Motors.
B. Lee Bentley is chief investment ficer and client contact.

orporate Property Investors

5 E. 47th St., New York, N.Y. 10017; (212) 421-8200

tal assets managed	$2,500,000,000
x-exempt assets managed	$2,400,000,000
al estate assets managed	$2,400,000,000
x-exempt clients	38
pes of accounts managed	CEFG

Corporate Property Investors is a al estate manager that invests in a nited number of very large, fully ased properties. The principal inter- ts are in 38 super-regional shopping nters and two major office buildings. All tax-exempt assets were in equity al estate as of Jan. 1.
The firm had a net gain of $90 mil- n in 1985 in new tax-exempt busi- ss. One client was added.
Clients include AT&T, U.N. Pension nd, Ford Foundation and Pennsyl- nia Public Employees.
Hans C. Mautner, president, is chief vestment officer. Client contact is arren G. Hamer.

owen Asset Management

Battery Park Plaza, New York, N.Y. 10004; (212) 483-0700

tal assets managed	$181,000,000
x-exempt assets managed	$99,000,000
inimum separate account	$1,000,000
x-exempt clients	148
pes of accounts managed	CEG
of portfolio managers	4

Equity manager Cowen Asset Man- gement takes an appreciation pproach, which relies on fundamental hange and corporate event, and a owth/income approach, which relies dividend yield, balance sheets and luation focus.
The asset mix Jan. 1 was 80% ocks and 20% cash.
Clients include North Haven (Conn.) unicipal Employees and Point Pleas- t Hospital.
Chief investment officer is Howard hawn, director of portfolio manage- ent. Client contact is William echler, senior vice president.

he Crabbe-Huson Co.

211 S.W. Fifth St., Suite 2900, Portland, Ore. 97204; (503) 295-0111

tal assets managed	$192,000,000
x-exempt assets managed	$177,000,000
inimum separate account	$5,000,000
x-exempt clients	25
pes of accounts managed	CFJ
of portfolio managers	2

The Crabbe-Huson Co., primarily an quity manager, is a contrarian, buying w-risk, large-cap stocks on bad news nd selling on good news. Stocks must e priced at substantial discounts to eaks before they become attractive.
In fixed income, interest rate antici- ation is emphasized. The firm invests those sectors offering favorable yield elationships and uses only ' ...er rat- g instruments.
The asset mix Jan. 1 was 55% ocks, 17% bonds and 28% cash.
Chief investment officers are James . Crabbe, president, and Richard S. uson, vice president. Client contact is ames Vogelzang, president, Vogel- ang & Associates, P.O. Box 890, alistoga, Calif. 94515.

The annual directory of real

Cramblit & Carney Inc.

523 W. Sixth St., Suite 723, Los Angeles, Calif. 90014; (213) 680-0562

Total assets managed	$412,000,000
Tax-exempt assets managed	$302,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	18
Types of accounts managed	CEFJ
No. of portfolio managers	3

Cramblit & Carney Inc. is an equity and balanced manager that looks for low p/e in stocks and emphasizes interest rate anticipation in its fixed-income approach.
The asset mix Jan. 1 was 42% stocks, 26% bonds and 32% cash.
The firm had a net gain of $26 million in new tax-exempt business in 1985. One client was added.
The firm follows 100 stocks closely and 250, generally.
Clients include Provision Workers Pension Fund, Heritage Life Insurance, Claremont University Center and Motion Picture & Television Fund.
Richard P. Carney, president, is chief investment officer; Barry T. Seymour, vice president, is client contact.

Cramer Rosenthal McGlynn

707 Westchester Ave., White Plains, N.Y. 10604; (914) 681-4470

Total assets managed	$200,000,000
Tax-exempt assets managed	$34,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	11
Types of accounts managed	CF
No. of portfolio managers	3
Size of research staff	2

Cramer Rosenthal McGlynn Inc. is an equity and balanced manager.
In equities, the firm's approach combines value and theme investing; in fixed income, it emphasizes interest rate anticipation with investments designed for risk aversion or income generation.
The asset mix Jan. 1 was 43% stocks, 47% bonds and 10% cash.
The firm had a net gain of $5 million in 1985 in new tax-exempt business. One client was added.
Gerald B. Cramer, chairman, and Ronald H. McGlynn, president, are the chief investment officers. Mr. Cramer is the client contact.

Crawford Investment Counsel Inc.

3 Piedmont Center, Suite 130, Atlanta, Ga. 30305; (404) 262-1893

Total assets managed	$110,000,000
Tax-exempt assets managed	$75,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	13
Types of accounts managed	CF
No. of portfolio managers	1
Size of research staff	1

Crawford Investment Counsel Inc. is an equity manager that emphasizes stocks with above-average yield and consistent dividend increases. It favors large-cap companies, and portfolios are less volatile than the market in general.
The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.
The firm experienced a $10 million net gain in tax-exempt business in 1985. One client was added.
John H. Crawford, president, is chief investment officer. Sarah Jane Ross is client contact.

Credit Suisse First Boston (Asset Management) Ltd.

22 Bishopsgate, London, England; (01) 634-3000

Total assets managed	$50,000,000
Tax-exempt assets managed	$0
Minimum separate account	$10,000,000
Types of accounts managed	C
No. of portfolio managers	3

Credit Suisse First Boston (Asset Management) Ltd. is a fixed-income manager.
Manfred J. Adami, chairman, is chief investment officer.

Criterion Investment Management Co.

333 Clay St., Suite 4300, Houston, Texas 77002; (713) 751-2400

Passive assets managed	$200,000
Minimum separate account	$10,000,000
Tax-exempt clients	130
Types of accounts managed	CEFGJ
No. of portfolio managers	14
Size of research staff	10

Criterion Investment Management Co. is an equity, fixed-income and balanced manager.
In equities, relative attractiveness of stocks vs. cash equivalents is determined along with identifying concepts and investment themes that will positively effect industry sectors and groups.
In fixed income it uses Portfolio Characterization, a proprietary computer system designed to evaluate and monitor the risk/reward relationship of both individual bonds and portfolios of bonds. Interest rate anticipation also is used.
Criterion uses options, stock index futures and fixed-income futures.
About 150 stocks are followed generally.
Clients include Tenneco, Nevada, San Diego G&E and Illinois.
Charles Miller, president, is chief investment officer. John R. Pipkin, director of marketing, is the client contact.

Crocker Investment Management Corp.

595 Market St., San Francisco, Calif. 94105; (415) 477-8811

Total assets managed	$1,600,900,000
Tax-exempt assets managed	$1,600,000,000
Real estate assets managed	$396,000,000
Passive assets managed	$32,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	27
Types of accounts managed	CGJ
No. of portfolio managers	6
Size of research staff	5

Crocker Investment Management is an equity, fixed-income and balanced manager, relying on sector rotation in its equity approach and on sector analysis in its fixed-income approach. Options are used.
The asset mix Jan. 1 was 54% stocks, 20% bonds, 9% cash, 1% equity real estate and 16% mortgage-backed securities.
The firm experienced a net loss in tax-exempt business in 1985 of $510 million. The research staff follows 275 stocks closely and 500, generally.
Clients include San Francisco City and County, IT&T and the Los Angeles Department of Water.
Chief investment officer is Kennard Woodworth Jr., president and director of research. Client contact is Philip J. Fox, senior vice president and director of marketing.

Crocker National Bank — Business Trust Services

333 S. Grand Ave., Suite 640, Los Angeles, Calif. 90071; (213) 253-3223

Total assets managed	$791,000,000
Tax-exempt assets managed:	
Total	$791,000,000
Commingled accounts	$251,000,000
Separate accounts	$540,000,000
Real estate assets managed	$178,000,000
International assets managed	$6,000,000
401(k) and 457 assets managed	$119,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	346
Separate	34
Types of accounts managed	CFGJ
No. of portfolio managers	8
Size of research staff	5

Crocker National Bank-Business Trust Services is an equity, fixed-income, balanced, real estate, international and guaranteed investment contract manager.
The equity approach focuses on growth and turnaround issues within promising sectors.
The fixed-income approach uses rate anticipation, and captures value through maturity and issue swaps.
In real estate, broad geographical, property type and tenant diversification is stressed.
The asset mix Jan. 1 was 45% stocks, 10% bonds, 5% cash, 7.5% equity real estate, 10% mortgages, 5% mortgage-backed securities, 7.5% international and 10% guaranteed assets.
F. John Early, vice president, is chief

Crown Life Insurance Co.

201 N. Union St., Alexandria, Va. 22314; (703) 684-4561

Total assets managed	$1,325,000,000
Tax-exempt assets managed	$1,204,000,000
401(k) and 457 assets managed	$45,000,000
GICs	$1,175,000,000
Other	$150,000,000

Crown Life Insurance Co. is a guaranteed investment contract manager.
In 1985, the company received $290 million in deposits for GICs.
The company is affiliated with Beutel, Goodman & Co. Total assets of the parent company and subsidiaries are $4.4 billion, of which $1.5 billion are tax-exempt.
Chief investment officer is A.G. Wirth, senior vice president-investments. John Mullis, assistant vice president and director of sales, is client contact.

C-S Capital Advisors Inc.

8150 Corporate Park Drive, Suite 224, Cincinnati, Ohio 45242; (513) 489-5556

Total assets managed	$320,000,000
Tax-exempt assets managed	$320,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	14
Types of accounts managed	CEFG
No. of portfolio managers	4

C-S Capital Advisors Inc. is an equity manager that emphasizes a long-term, predetermined, disciplined strategy stressing value in out-of-favor stocks and uses an active options-writing program to enforce a sell discipline.
The asset mix Jan. 1 was 70% stocks, 5% bonds and 25% cash.
The firm had a $127 million net gain in tax-exempt business in 1985. Two clients were added.
C-S Capital follows 75 stocks closely and 125, generally.
Clients include Cincinnati, National Rural Electric Cooperative Association, Kroger and 3M.
C. Clifford Stahl, president, is chief investment officer. Client contact is Paul G. Chenault, chairman and chief executive officer.

C&S Investment Advisors

P.O. Box 4114, Atlanta, Ga. 30302; (404) 897-3306

Total assets managed	$2,497,000,000
Tax-exempt assets managed	$1,650,000,000
Real estate assets managed	$42,000,000
International assets managed	$10,000,000
401(k) and 457 assets managed	$105,000,000
Passive assets managed	$5,000,000
Minimum separate account	$500,000
Tax-exempt clients	58
Types of accounts managed	CEFGJ
No. of portfolio managers	12
Size of research staff	7

C&S Investment Advisors Inc. is an equity, fixed-income and balanced manager.
The equity approach emphasizes low p/e, earnings momentum and positive earnings surprise.
The fixed-income approach uses controlled adjustments in maturities and sector shifts. Emphasis is placed on high quality.
Options, stock index futures and fixed-income futures are used.
In real estate, it acquires commercial properties in Southeastern cities; value is added by management.
The Jan. 1 tax-exempt asset mix was 45% stocks, 45% bonds and 10% cash.
Managers follow 1,000 stocks closely and 1,000, generally; 25% of research is generated internally.
It is a wholly owned subsidiary of Citizens & Southern Corp., a bank holding company.
James L. Kermes, president, is chief investment officer. K. David Wheeler, vice president-marketing, is client contact.

Cullen Center Bank & Trust

P.O. Box 1315, Houston, Texas 77251; (713) 652-7600

Total assets managed	$150,000,000
Tax-exempt assets managed:	
Total	$77,000,000
Commingled accounts	$35,000,000
Separate accounts	$42,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	23
Separate	44
Types of accounts managed	CJ
No. of portfolio managers	2
Size of research staff	2

Cullen Center Bank & Trust handles equity, fixed-income and balanced accounts.
The equity approach emphasizes relative valuation combined with price momentum and market timing.
In fixed income, the emphasis is on defensive investing with regard to interest rate anticipation and active sector and yield curve spread analysis.
The tax-exempt asset mix Jan. 1 was 40% stocks, 35% bonds, 23% cash and 2% equity real estate.
Robert B. McAshan III, senior vice president and trust investment officer, is chief investment officer and client contact.

Cumberland Advisors Pty.

614 Landis Ave., Vineland, N.J. 08360; (800) 257-7013 and (800) 232-6692 (in New Jersey)

Total assets managed	$110,000,000
Tax-exempt assets managed	$50,000,000
401(k) and 457 assets managed	$2,000,000
Minimum separate account	$100,000
Tax-exempt clients	82
Types of accounts managed	CEFJ
No. of portfolio managers	3
Size of research staff	3

Cumberland Advisors Pty. is a balanced manager.
The firm uses a top-down, fundamentally oriented equity approach, with a monetarist bias to find undervalued opportunities. Options are used.
In fixed income, it integrates interest rate anticipation, sector analysis and duration into a top-down approach.
The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.
Chief investment officers are Sheldon E. Goldberg and David R. Kotok. Client contacts are Donald Sulam and Suzanne Greenberg.

John M. Cunningham Inc.

150 Strafford Ave., Suite 208, Wayne, Pa. 19087; (215) 687-5060

Total assets managed	$15,000,000
Tax-exempt assets managed	$8,000,000
Minimum separate account	$50,000
Tax-exempt clients	30
Types of accounts managed	CEJ
No. of portfolio managers	1
Size of research staff	1

John M. Cunningham Inc. is an equity, fixed-income and balanced manager.
In equities, the firm takes an industry approach with a strong value bent. In fixed income, it uses long-term money analysis and a technical approach.
The asset mix Jan. 1 was 40% stocks, 10% bonds and 50% cash.
The firm had a net gain of $1 million in 1985 in new tax-exempt business. Three clients were added.
All of the research is generated in-house, with 37 stocks followed closely and 50, generally.
John M. Cunningham, president, is chief investment officer and client contact.

Martin Currie Ltd.

29 Charlotte Square, Edinburgh, Scotland EH2 4HA; 011 44 31 225-3811

Total assets managed	$1,200,000,000
Tax-exempt assets managed	$445,000,000
International assets managed	$148,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	26
Types of accounts managed	CEFG
No. of portfolio managers	10
Size of research staff	8

Martin Currie Ltd. is an equity and international manager.
Its equity approach includes growth and emerging growth stocks and sector rotation.
Its bond purchases and sales in the U.K. market are dictated by interest rate expectations.
The tax-exempt asset mix Jan. 1 was 90% stocks, 5% bonds and 5% cash.
In international markets for U.S. tax-exempt clients, $143 million was

David Skinner, managing director, is chief investment officer. Michael Kennedy, director, is a client contact.

Cutler & Co. Inc.

132 W. Main St., No. 204, Medford, Ore. 97501; (503) 779-5055

Total assets managed	$310,000,000
Tax-exempt assets managed	$286,000,000
401(k) and 457 assets managed	$1,000,000
Passive assets managed	$2,000,000
Minimum separate account	$500,000
Tax-exempt clients	200
Types of accounts managed	CEFGJ
No. of portfolio managers	1
Size of research staff	1

Cutler & Co. Inc. is an equity manager that emphasizes the highest quality, highest yield portfolio with industry diversification. It switches between eligible issues on basis points to increase income.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm experienced a net gain in new tax-exempt business in 1985 of $61 million, and added 48 clients.

All of the research is generated internally, with 92 stocks followed closely and 200, generally.

Clients include Oregon, Kern County, Whittaker and Woodward Governor.

Kenneth R. Cutler, chairman of the board, is chief investment officer. Client contact is Mark S. Patten, executive vice president.

d

Daiwa International Capital Management Corp.

1 Liberty Plaza, New York, N.Y. 10006; (212) 732-6600

Total assets managed	$7,415,000,000
Tax-exempt assets managed	$213,000,000
International assets managed	$213,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	6
Types of accounts managed	CG
No. of portfolio managers	46
Size of research staff	10

Daiwa International Capital Management Corp. is an active, research-oriented international manager seeking incremental returns from equity investments in the international markets. Stock selection focuses on long-term growth potential and the relative value of the stock price.

The asset mix Jan. 1 was 97% stocks and 3% cash.

The firm had a net loss in 1985 in tax-exempt business of $7 million. Two clients were added.

Half of the research is generated internally, with 300 stocks followed closely and 2,600 followed generally (2,000 in Japan).

Clients include GM, Frank Russell Trust, Pacific Lighting and Hawaii.

Daiwa International Capital Management Corp. is a subsidiary of Daiwa International Capital Management Co. Ltd., Tokyo, which is affiliated with Daiwa Securities Co. Ltd.

Keisuke Ohshima, managing director, is chief investment officer. Client contact is Michael J. Bonner, senior vice president.

D.A. Management Inc.

7711 Center Ave., Suite 520, Huntington Beach, Calif. 92647; (714) 891-6080

Total assets managed	$76,000,000
Tax-exempt assets managed	$65,000,000
Real estate assets managed	$45,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	3

D.A. Management Inc. is a real estate manager handling aggressive, "venture capital" real estate transactions and standard institutional transactions.

The tax-exempt asset mix Jan. 1 was 20% equity real estate, 47% mortgages and 33% committed but not yet funded.

Clients include Orange County Employees and San Bernardino County Employees.

Daniel M. Ardell, president, is chief investment officer and client contact.

Dana Investment Advisors

P.O. Box 1067, Brookfield, Wis. 53008-9067; (414) 782-0035

Total assets managed	$145,000,000
Tax-exempt assets managed	$125,000,000
401(k) and 457 assets managed	$30,000,000
Passive assets managed	$10,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	40
Types of accounts managed	CEFG
No. of portfolio managers	2

Dana Investment Advisors Inc. is an equity, fixed-income and balanced manager.

In equities, the firm emphasizes growth stock, market timing and dividend yield. In fixed income, it takes a passive approach, using fixed- and variable-rate government-backed securities.

The asset mix Jan. 1 was 15% stocks, 15% bonds, 5% cash and 65% variable- and fixed-rate government-backed securities.

Michael L. Dana, president, is chief investment officer. Client contact is Donald J. Moore, vice president-sales and marketing.

John Stewart Darrell & Co.

205 E. High St., Charlottesville, Va. 22901; (804) 977-7010

Total assets managed	$54,000,000
Tax-exempt assets managed	$12,000,000
Minimum separate account	$500,000
Tax-exempt clients	15
Types of accounts managed	CF
No. of portfolio managers	1

John Stewart Darrell & Co. is an equity manager that seeks stocks with a low price-to-book-value ratio, low multiple to cash flow and low multiple to net, net working capital, high LIFO reserves and hidden assets.

The asset mix Jan. 1 was 50% stocks and 50% cash.

The firm had a net gain of $1 million in new tax-exempt business in 1985.

Seventy percent of the research is generated internally, with 35 stocks followed closely and 80, generally.

John Stewart Darrell, president, is chief investment officer and client contact.

Davenport Asset Management

P.O. Box 1377, Richmond, Va. 23211; (804) 780-2117

Total assets managed	$109,000,000
Tax-exempt assets managed	$32,000,000
Minimum separate account	$200,000
Tax-exempt clients	23
Types of accounts managed	CEF
No. of portfolio managers	6
Size of research staff	3

Davenport Asset Management is an equity and balanced manager.

It is a value-oriented equity manager, emphasizing low p/e. In fixed-income, it takes a passive approach, typically using Treasury issues with a maturity spread designed to diversify rate exposure risk.

The asset mix Jan. 1 was 65% stocks, 25% bonds and 10% cash.

The firm is the investment advisory division of Davenport & Co. of Virginia.

Chief investment officer is Joseph L. Antrim, senior vice president. Client contact is Nancy P. Jenkins, administrator-investment management..

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

Davis/Dinsmore Management Co.

42 Broadway, New York, N.Y. 10004; (212) 269-9236

Total assets managed	$55,000,000
Tax-exempt assets managed	$0
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Davis/Dinsmore Management Co. handles mutual fund accounts, investing in convertible securities. Fundamental analysis is used to determine attractive stocks, and debentures or preferred stocks are then bought that

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convert into those equities.

The firm manages Bancroft Convertible Fund Inc., a closed-end mutual fund.

Half of the research is generated in-house; 150 stocks are followed closely and 350, generally.

Ronald E. Dinsmore, chairman, is chief investment officer. Tom Dinsmore, president, is the client contact.

Davis, Weaver & Mendel Inc.

3312 Piedmont Road No. 222, Atlanta, Ga. 30305; (404) 233-1263

Total assets managed	$32,000,000
Tax-exempt assets managed	$25,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$500,000
Tax-exempt clients	17
Types of accounts managed	CFJ
No. of portfolio managers	1
Size of research staff	1

Davis, Weaver & Mendel Inc. is primarily an equity manager.

Its equity approach is to aggressively adjust portfolio exposure to sector stocks through market timing.

In fixed income, it switches between long-term bonds and Treasury bills based on interest rate analysis.

It uses options, stock index futures and fixed-income futures.

The Jan. 1 tax-exempt asset mix was 80% stocks and 20% cash.

Ned Davis, chairman, is chief investment officer. Thomas H. Weaver is client contact.

Dawes Investment Service

900 E. Indiantown Road, Suite 305, Jupiter, Fla. 33477; (305) 747-0896

Total assets managed	$41,000,000
Tax-exempt assets managed	$33,000,000
Minimum separate account	$100,000
Tax-exempt clients	15
Types of accounts managed	CEF
No. of portfolio managers	1
Size of research staff	1

Dawes Investment Service is an equity manager that stresses low p/e and sector rotation in its approach, using a disciplined, value-oriented strategy. Convertible bonds are used.

The asset mix Jan. 1 was 91% stocks and 9% cash.

The firm had a net gain of $3 million in new tax-exempt business in 1985. Four clients were added.

Richard C. Sunshine, president, is chief investment officer. Kristy J. Dodge, operations manager, is the client contact.

International advisers are profiled in the Aug. 4 issue.

Dearden, Maguire and Weaver Inc.

Suite 1702, Two Penn Center Plaza, Philadelphia, Pa. 19102; (215) 972-0888

Total assets managed	$410,000,000
Tax-exempt assets managed	$240,000,000
Minimum separate account	$500,000
Tax-exempt clients	35
Types of accounts managed	CEFGJ
No. of portfolio managers	5

Dearden, Maguire and Weaver Inc. is a balanced manager that relies on a quality-oriented equity approach based upon economic outlook, relative valuation analysis and fundamental and technical data.

Based on interest rate anticipation, fixed-income investments are confined to securities with A ratings or better and maturities of seven years or less.

The asset mix Jan. 1 was 40% stocks, 50% bonds, and 10% cash.

In 1985, the firm had a $15 million net gain in tax-exempt business; one new client was added.

Chief investment officers are James M. Weaver, treasurer, and Alexander A. Maguire, secretary. Client contact is Edward C. Dearden, president.

Degnan & Gillespie Fixed Income Management Inc.

45 N. Broad St., Ridgewood, N.J. 07450; (201) 445-4970

Total assets managed	$295,000,000
Tax-exempt assets managed	$295,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	6
Types of accounts managed	CE
No. of portfolio managers	3

Degnan & Gillespie Fixed Income Management Inc. is a fixed-income manager. Using interest rate anticipation, the firm seeks to preserve capital and generate positive, consistent and attractive investment returns over the entire interest rate cycle.

All tax-exempt assets were in cash as of Jan. 1.

It had a net loss of $179 million in 1985 in tax-exempt business.

Clients include Chevron, Commercial Credit, Blue Cross Blue Shield of North Carolina and Engelhard Corp.

James K. Degnan, president, is chief investment officer. Mr. Degnan and Douglas R. Gillespie Sr., vice president, are client contacts.

DeJarnette Investment Advisors

12 Spirea Drive, Dayton, Ohio 45419; (513) 294-7625

Total assets managed	$12,000,000
Tax-exempt assets managed	$6,000,000
Minimum separate account	$250,000
Tax-exempt clients	15
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

DeJarnette Investment Advisors is primarily an equity manager investing mostly in regional securities of Southeastern states.

The tax-exempt asset mix Jan. 1 was 47% stocks, 23% bonds and 30% cash.

In 1985, the firm realized a $500,000 net gain in new tax-exempt equity accounts. One client was added.

J.H. DeJarnette, president, is chief investment officer and client contact.

Delafield Asset Management

63 Wall St., New York, N.Y. 10005; (212) 269-0660

Total assets managed	$486,000,000
Tax-exempt assets managed	$421,000,000
401(k) and 457 assets managed	$2,000,000
Minimum separate account	$500,000
Tax-exempt clients	22
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	4

Delafield Asset Management Inc. is an equity manager that emphasizes preservation of capital through investment in undervalued securities and special situations. A passive approach is taken to fixed income.

The asset mix Jan. 1 was 80% stocks and 20% cash.

The firm had a net gain of $27 million in new tax-exempt business in 1985; three clients were added.

Ninety percent of research is generated internally, with 75 stocks watched closely and 225, generally.

Clients include PSA, General Host, Safeway Stores and Republic Automotive Parts.

J. Dennis Delafield is chief investment officer. Client contact is Alice B. Hicks.

Delafield, Harvey, Tabell Inc.

600 Alexander Road, Princeton, N.J., 08540; (609) 987-2300

Total assets managed	$325,000,000
Tax-exempt assets managed	$88,000,000
Minimum separate account	$500,000
Tax-exempt clients	44
Types of accounts managed	CEF
No. of portfolio managers	5
Size of research staff	6

Delafield, Harvey, Tabell, primarily an equity manager, blends technical and fundamental analysis to isolate market segments most attractive for investment, with a bias toward low p/e and moderate yield stocks.

25 largest dedicated/immunized managers

Rank	Managers	$ millions
1.	J.P. Morgan Investment	5,700
2.	National Investment Services of America	3,750
3.	Prudential Asset Management Group	3,563
4.	Bankers Trust-Investment Management Group	2,280
5.	Manufacturers Hanover Investment	1,810
6.	Chase Investors Management	1,408
7.	Mellon Bank	994
8.	MidAmerica Management	900
9.	Scudder, Stevens & Clark	700
10.	Equitable Capital Management	651
11.	United States Trust Co. of New York	600
12.	Putnam Advisory	572
13.	Fischer, Francis, Trees & Watts	560
14.	Mercantile Trust	550
15.	National Bank of Detroit	550
16.	Wells Fargo Investment Advisors	544
17.	Irving Trust	531
18.	Alliance Capital Management	500
19.	McGlinn Capital Management	500
20.	First Wisconsin Trust	465
21.	Citicorp Investment Management	457
22.	Minton/Newbold's Capital Management	440
23.	BEA Associates	439
24.	Robert C. Brown & Co.	432
25.	Lehman Management	420
	TOTAL	29,316

In fixed income, the majority of bonds used are shorter maturity governments or corporates with unusual discounts or sinking fund provisions.

The tax-exempt asset mix Jan. 1 was 70% stocks, 25% bonds and 5% cash.

The firm experienced a net gain of $10 million in tax-exempt assets in 1985; five clients were added.

The chief investment officers are Maturin L. Delafield and Ashton Harvey, managing director. Client contact is Joseph A. Gallagher, vice president.

Delaware Investment Advisers

10 Penn Center Plaza, Philadelphia, Pa. 19103; (215) 751-2933

Total assets managed	$9,196,000,000
Tax-exempt assets managed	$9,094,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	187
Types of accounts managed	CEFGJ
No. of portfolio managers	14

Delaware Investment Advisers, an equity and fixed-income manager, bases its equity approach on low p/e, sector rotation and income.

Its total rate-of-return philosophy emphasizes an absolute rate of return over inflation, preservation of capital, consistency of return and lower than market volatility.

The fixed-income approach is in the high-yield segment of the bond market (BBB or lower). Its strategy is primarily defensive, viewing reinvestment of coupon payments as the dominant portion of total return.

The tax-exempt asset mix Jan. 1 was 87.7% stocks, 7.3% bonds, and 5% cash.

The firm had a net gain of $361 million in tax-exempt business in 1985 and acquired 16 new clients.

Thirty-five percent of research is generated internally, with 250 stocks followed closely and 450, generally.

Clients include Lockheed, Vermont State Teachers, Marriott and San Diego G&E.

The chief investment officer is John H. Durham, chief executive officer. Client contact is Winthrop S. Jessup, senior vice president.

Delta Financial Inc.

3500 Pacific Ave., Virginia Beach, Va. 23451; (804) 491-1200

Total assets managed	$105,000,000
Tax-exempt assets managed	$92,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	26
Types of accounts managed	CEFJ
No. of portfolio managers	7

Delta Financial Inc., an equity manager, uses quantitative methods to seek value, developing portfolios based on current economic themes.

In fixed income, managers use a core-tactical approach emphasizing duration shifts and sector analysis. Portfolio insurance techniques are used.

The tax-exempt asset mix Jan. 1 was 60% stocks and 40% bonds.

In 1985, the firm realized a net gain of $49 million in new tax-exempt business; eight clients were added.

Mark T. Finn, president, is chief investment officer. Eloise C. Chandler, principal, is the client contact.

Denver Investment Advisors

633 17th St., Suite 1800, Denver, Colo. 80217; (303) 293-5588

Total assets managed	$1,825,000,000
Tax-exempt assets managed	$1,680,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	60
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	8

Denver Investment Advisors Inc. is an equity, fixed-income and balanced manager.

In equities, it focuses on growth stock and low p/e. In fixed income, it uses both long- and intermediate-term approaches emphasizing corporate bonds, undervalued sectors and special situation bonds.

As of Jan. 1, the tax-exempt asset mix was 69% stocks, 26% bonds and 5% cash.

In 1985, the firm showed a net loss of $27.5 million in tax-exempt business. Five new clients were added.

The firm follows 130 stocks closely, 200 generally. About 70% of research is generated internally.

Clients include AT&T, U S WEST, Rohm & Haas and Northwest Airlines.

The firm is a wholly owned subsidiary of First Interstate Bank of Denver.

Kenneth V. Penland, chairman/director of research, is chief investment officer. Dennis E. Larkin, vice president, is client contact.

Dewey Square Investors

P.O. Box 1727, Boston, Mass. 02105; (617) 654-6217

Total assets managed	$2,900,000,000
Tax-exempt assets managed	$2,900,000,000
Real estate assets managed	$30,000,000
Passive assets managed	$380,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	90
Types of accounts managed	CEF
No. of portfolio managers	9

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818-244-8080

uity, fixed-income and balanced manager.

Its equity approach combines low p/e and Graham & Dodd methods to seek out opportunities for economic growth.

In fixed income, it uses interest rate anticipation, favoring high-quality securities and intermediate maturities.

The tax-exempt asset mix Jan. 1 was 65% stocks, 25% bonds, 5% cash and 5% mortgage-backed securities.

In 1985, the firm realized a net gain of $30 million in tax-exempt business. Five new clients were added.

Managers follow 150 stocks closely, 6,000 generally. About 40% of research is generated internally.

Clients include Ford, Stop & Shop, Gillette and American Airlines.

The firm is wholly owned by Bank of Boston.

William B. Moody is senior vice president and chief investment officer; Karen L. Maguire, director of marketing, is the client contact.

Dietche & Field Advisers Inc.

437 Madison Ave., New York, N.Y. 10022; (212) 752-2047

Total assets managed	$78,000,000
Tax-exempt assets managed	$78,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	1

Dietche & Field Advisers Inc., an equity manager, selects the best in various methods and styles, using internal and external research to seek undervalued stocks.

The tax-exempt asset mix Jan. 1 was 79% stocks and 21% cash.

The firm follows 50 stocks closely and 100, generally; 25% of research is generated internally.

Boise Cascade is the client.

Paul C. Dietche, president, is chief investment officer. Lincoln P. Field, vice president, is the client contact.

Dillon, Read Capital Inc.

535 Madison Ave., New York, N.Y. 10022; (212) 906-7659

Total assets managed	$1,068,000,000
Tax-exempt assets managed	$1,046,000,000
Minimum separate account	$3,000,00
Tax-exempt clients	21
Types of accounts managed	CFG
No. of portfolio managers	4

Dillon, Read Capital Inc. primarily is an equity manager.

It invests in undervalued stocks of quality companies and raises cash when risks are high. In fixed income, analysis of changes and trends in overall financial liquidity result in interest rate forecasts and changes in maturity.

The tax-exempt asset mix was 89.3% stocks, 2.4% bonds and 8.3% cash.

In 1985, the firm realized a $178 million net gain in new tax-exempt business; 11 clients were added.

Three-fourths of research is done internally; 150 stocks are followed closely and more than 500, generally.

Clients include Frank Russell Trust, Illinois Municipal Retirement, Hughes Aircraft and Goodyear.

The firm is a wholly owned subsidiary of Dillon, Read & Co. Inc.

Timothy G. Dalton Jr., president and chief executive officer, is chief investment officer. David A. Dewey, executive vice president, is client contact.

Dimensional Fund Advisors

1299 Ocean Ave., Suite 650, Santa Monica, Calif. 90401; (213) 395-8005

Total assets managed	$2,430,000,000
Tax-exempt assets managed	$2,347,000,000
Passive assets managed	$2,347,000,000
Tax-exempt clients	119
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	2

Dimensional Fund Advisors Inc. is an equity, fixed-income and balanced manager.

Stressing small-cap stocks, the firm searches for companies that have outperformed the S&P 500 for most five-year periods, with more reliable premiums for longer periods.

In fixed income, it uses a variable maturity strategy without interest rate forecasting.

The tax-exempt asset mix Jan. 1 was 90% stocks and 10% bonds.

In 1985, the firm realized a $247 million net gain in new tax-exempt business; 20 clients were added.

Ninety percent of research is generated internally, with 2,000 stocks watched closely and 2,600, generally.

Clients include GM, IBM, Maryland and New York City.

Rex A. Sinquefield is chairman and chief investment officer. David G. Booth, chairman and chief executive officer, is client contact.

Disciplined Investment Advisors Inc.

1718 Sherman Ave., Evanston, Ill. 60201; (312) 328-6707

Total assets managed	$200,000,000
Tax-exempt assets managed	$190,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	18
Types of accounts managed	CEG
No. of portfolio managers	3
Size of research staff	3

Disciplined Investment Advisors Inc. is an equity manager that has a highly disciplined, Graham & Dodd approach to selecting stocks within the S&P 500.

As of Jan. 1, all tax-exempt assets were in stocks.

All of the research is generated internally, with 500 stocks watched closely and 2,500, generally.

Eugene M. Lerner, principal, is chief investment officer. Client contact is Daniel J. Schweihs, partner.

Discount Corp. of New York Advisers

58 Pine St., New York, N.Y. 10005; (212) 248-8989

Total assets managed	$2,620,000,000
Tax-exempt assets managed	$2,510,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	13
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	4

Discount Corp. of New York Advisers, a fixed-income manager, adjusts portfolio investments for anticipated interest rate movements. The firm emphasizes protection during market downturns and tries to capture some portion of market rallies.

As of Jan. 1, the tax-exempt asset mix was 50% bonds and 50% cash.

In 1985, the firm realized a $335 million net gain in new tax-exempt business. Three clients were added.

Clients include PacTel, Kodak, General Dynamics, and J.P. Getty Museum.

The firm is a wholly owned subsidiary of Discount Corp. of New York.

Patricia W. de Blank, president, is chief investment officer. William J. Callahan, vice president, is the client contact.

Dixon & Hubard Inc.

P.O. Box 2768, Roanoke, Va. 24001; (703) 343-9903

Total assets managed	$45,000,000
Tax-exempt assets managed	$20,000,000
Minimum separate account	$500,000
Tax-exempt clients	12
Types of accounts managed	CEF
No. of portfolio managers	2

Dixon & Hubard Inc., a balanced manager, uses a growth stock approach to stocks and a passive approach to fixed income.

The tax-exempt asset mix Jan. 1 was 60% stocks, 35% bonds and 5% cash.

In 1985, the firm realized a $2 million net gain in new tax-exempt business. Two clients were added.

All research is generated in-house, with 60 stocks followed closely and 400, generally.

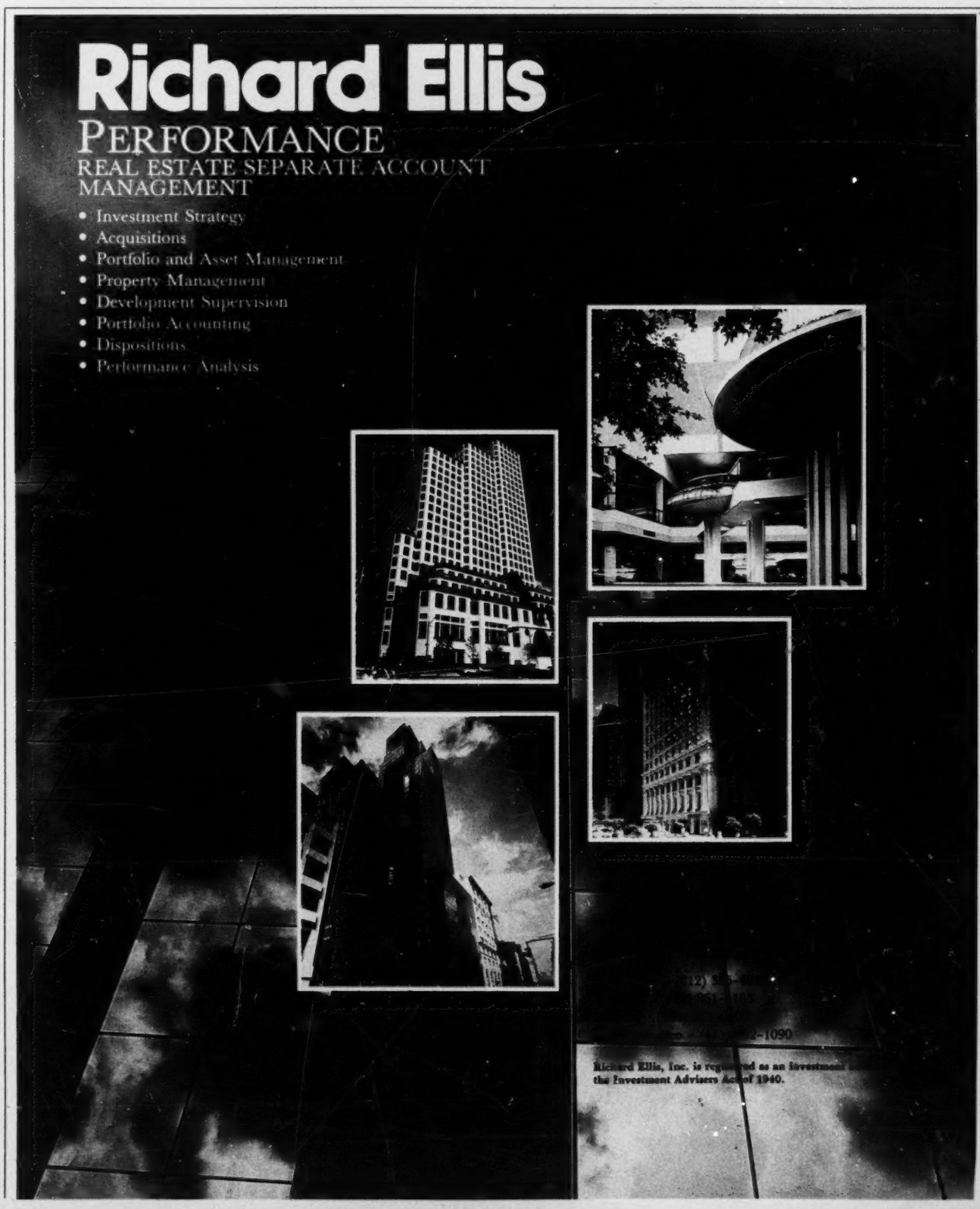
Walter M. Dixon Jr., president, is chief investment officer. W. Stebbins Hubard Jr. is the client contact.

D.J. Investment Advisors

Fox Pavilion, Suite 310, Jenkintown, Pa. 19046; (215) 887-6946

Total assets managed	$75,000,000
Tax-exempt assets managed	$27,000,000
Minimum separate account	$400,000
Tax-exempt clients	38
Types of accounts managed	CEF
No. of portfolio managers	2

D.J. Investment Advisors Inc. is a



balanced manager that specializes in hedging and arbitrage strategies for clients seeking above-average gains with minimal risk.

In fixed income, managers stress interest rate anticipation.

It uses options and stock index futures.

The asset mix Jan. 1 was 45% stocks, 40% bonds and 15% cash.

Half of the research is generated internally, with 50 stocks watched closely and 200, generally.

David A. Schwerin, president, is chief investment officer and client contact.

Dodge & Cox

1 Post St., 35th Floor, San Francisco, Calif. 94104; (415) 981-1710

Total assets managed	$3,629,000,000
Tax-exempt assets managed	$3,001,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	77
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	9

Dodge & Cox is an equity, fixed-income and balanced manager.

In equities, it invests in established companies with positive earnings prospects not entirely reflected in current prices and in major themes with strong potential.

Its fixed-income approach combines interest rate anticipation, sector analysis and individual security analysis.

The tax-exempt asset mix Jan. 1 was 61% stocks, 35% bonds and 4% cash.

In 1985, the firm realized a $211 million net gain in new tax-exempt business. Five clients were added.

The firm follows 200 stocks closely and 400, generally. Three-fourths of research is generated internally.

Peter Avenali, chairman and chief executive officer, is chief investment officer. Harry R. Hagey, executive vice president, is client contact.

Douglas, Noyes & Co. Inc.

50 Broad St., New York, N.Y. 10004; (212) 668-3043

Total assets managed	$91,000,000
Tax-exempt assets managed	$27,000,000
401(k) and 457 assets managed	$250,000
Minimum separate account	$500,000
Tax-exempt clients	11
Types of accounts managed	CEF
No. of portfolio managers	3
Size of research staff	1

Douglas, Noyes & Co. Inc. is an equity manager using a growth stock approach to evaluate investments.

As of Jan. 1, the tax-exempt asset mix was 80% stocks and 20% cash.

In 1985, the firm realized a $3 million net gain in new tax-exempt business. Three clients were added.

One-fourth of research is generated internally, with 50 stocks followed closely and 200, generally.

James A.M. Douglas, president, is chief investment officer. Martha Kate Martin, investment associate, is client contact.

DP Asset Management Inc.

3801 Kennett Pike, C-304, Wilmington, Del. 19807; (302) 658-7675

Total assets managed	$91,000,000
Tax-exempt assets managed	$56,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$500,000
Tax-exempt clients	20
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	5

DP Asset Management Inc. is an equity and balanced manager.

In equities, it uses a bottom-up investment approach, focusing on small- to medium-sized companies with strong balance sheets, well-defined market niches and strong management. In fixed income, it uses convertibles and maturity-constrained government obligations.

The asset mix Jan. 1 was 80% stocks, 17% bonds and 3% cash.

The firm is a joint venture between Delfi American Corp. and Pierson, Heldring & Pierson.

T.F. Tjia, executive vice president-international, is chief investment officer. Mark C. Hanna, vice president, is the client contact.

Dreman & Embry Inc.

70 Pine St., Suite 4205, New York, N.Y. 10005; (212) 785-0202

Total assets managed	$952,000,000
Tax-exempt assets managed	$732,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	104
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	3

Dreman & Embry Inc. is an equity, fixed-income and balanced manager.

In equities, it invests in undervalued, low p/e stocks with high yields and solid fundamentals.

Its fixed-income approach uses interest rate anticipation and focuses on safety of principal and yield.

The Jan. 1 tax-exempt asset mix was 89.9% stocks and 10.1% bonds.

In 1985, the firm realized a $284.5 million net gain in new tax-exempt business; 49 clients were added.

Clients include Colorado FPPA, IMF, Federal Express and Humana.

Reserve Equity Trust, an equity fund manager, is an affiliate.

David N. Dreman, managing director, is chief investment officer. Murat H. Davidson Jr., managing director, is the client contact.

Drexel Burnham Lambert Investment Advisors

3 Mellon Bank Center, 32nd Floor, Philadelphia, Pa. 19102-2468; (215) 963-3500

Total assets managed	$1,904,000,000
Tax-exempt assets managed	$1,085,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	73
Types of accounts managed	CEFGJ
No. of portfolio managers	12
Size of research staff	100

Drexel Burnham Lambert Investment Advisors is an equity, fixed-income and balanced manager.

Its equity approach emphasizes high-quality, out-of-favor and undervalued companies. It uses a proprietary model that ranks companies based on relative value.

In fixed income, it tries to take advantage of short-term market inefficiencies and interest rate fluctuations through credit analysis, technical trading and arbitrage of sectors and issues.

Options and fixed-income futures are used.

The tax-exempt asset mix Jan. 1 was 55% stocks, 35% bonds and 10% cash.

In 1985, the firm realized a $159.9 million net gain in new tax-exempt business; 13 clients were added.

Clients include Philadelphia Electric, the city of Philadelphia, Brooklyn Union Gas and Drexel University.

Drexel Burnham Lambert Inc. is an affiliate.

W. Thacher Brown, senior vice president, is chief investment officer. James G. Hesser, vice president, is the client contact.

Dreyfus Management Inc.

767 Fifth Ave., New York, N.Y. 10153; (212) 715-6454

Total assets managed	$2,095,000,000
Tax-exempt assets managed	$1,986,000,000
Real estate assets managed	$60,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	48
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	3

Dreyfus Management Inc. is an equity, fixed-income and balanced manager.

The equity approach is value-oriented, low p/e and contrarian, and is designed to offer downside protection. Stock selection and asset mix decision are most important elements.

The fixed-income approach uses interest rate anticipation and sector analysis, with the average maturity coinciding with the peak of the yield curve.

The tax-exempt asset mix Jan. 1 was

45% stocks, 42% bonds, 10% cash and 3% mortgage-backed securities.

In 1985, the firm realized a $37 million net gain in new tax-exempt business; six clients were added.

Fifty stocks are followed closely and 1,500, generally; 90% of research is generated internally.

Clients include Illinois State Teachers, Mississippi Public Employees, Consolidated Edison and IC Industries.

The firm is a wholly owned subsidiary of The Dreyfus Corp.

Peter A. Santoriello, president, is chief investment officer. Bruce Kerr, vice president, is client contact.

Duff & Phelps Investment Management Co.

55 E. Monroe St., Suite 4000, Chicago, Ill. 60603; (312) 263-2610

Total assets managed	$2,657,000,000
Tax-exempt assets managed	$2,443,000,000
Real estate assets managed	$150,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	31
Types of accounts managed	CEFG
No. of portfolio managers	7
Size of research staff	75

Duff & Phelps Investment Management Co. is a balanced manager.

It uses a bottcm-up research approach to equities, emphasizing stocks with low p/e, high dividend income and above-average return on equity.

The fixed-income approach stresses preservation of capital and generation of income using high-quality issues. Maturity distribution is based on interest rate forecasts.

As of Jan. 1, the tax-exempt asset mix was 13% stocks, 82% bonds and 5% cash.

In 1985, the firm realized a $1,239 billion net gain in new tax-exempt business. Six clients were added.

Managers follow 300 stocks closely and 700 generally. All research is generated internally.

Clients include Arizona State Compensation Fund, Seattle City Employees, Lincoln Foundation and Ohio State Highway Patrol.

Robert D. Milne, president, is chief investment officer. Richard R. Davis, senior vice president, is client contact.

Eagle Asset Management

1400 66th St. N., St. Petersburg, Fla. 33733; (800) 237-3101

Total assets managed	$354,000,000
Tax-exempt assets managed	$208,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	11
Types of accounts managed	CEFGJ
Size of research staff	8

Eagle Asset Management Inc. is an equity manager that primarily invests in non-technology growth stocks with a significant value component.

The asset mix Jan. 1 was 74% stocks and 26% cash.

The firm had a net gain of $80 million in new tax-exempt business in 1985.

Three-fourths of the research is generated internally, with 50 stocks followed closely and 200, generally.

Clients include Florida, Mars Inc., Bakers & Confectionary Union and Evaluation Associates Small Managers Equity Fund.

Seventy percent of the firm is owned by RJ Financial Corp.

Herbert E. Ehlers, president, is chief investment officer. Client contact is Lincoln Kinnicutt, senior vice president.

Eastdil Realty Inc.

40 W. 57th St., New York, N.Y. 10019; (212) 315-7200

Total assets managed	$1,450,000,000
Tax-exempt assets managed	$1,300,000,000
Real estate assets managed	$1,300,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	9
Types of accounts managed	CGJ

Eastdil Realty Inc., a real estate manager, creates portfolios that combine client priorities with the complexities of the real estate market. The approach focuses on quality properties with potential for value enhancement located in strong markets.

The asset mix Jan. 1 was 90% equity real estate and 10% mortgages.

Clients include AT&T, California State Teachers, Chrysler and Virginia Supplemental.

Robert T. Davis, executive vice president, is chief investment officer. Client contact is Donald E. Conover, vice president.

Eaton Vance Management

24 Federal St., Boston, Mass. 02110; (617) 482-8260

Total assets managed	$4,129,000,000
Tax-exempt assets managed	$1,317,000,000
International assets managed	$150,000,000
401(k) and 457 assets managed	$200,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	110
Types of accounts managed	CEFGJ
No. of portfolio managers	17
Size of research staff	13

Eaton Vance Management, primarily an equity manager, invests in small- and large-cap companies whose current price fails to reflect the favorable outlook for improving cash flow, profit margins, ROE and appreciation based upon an expansion of earnings and p/e.

In fixed income, it is an active manager whose approach incorporates asset allocation, swapping and interest rate anticipation.

Options and fixed-income futures are used.

The mix of tax-exempt assets Jan. 1 was 71% stocks, 19% bonds and 10% cash.

In 1985, the firm experienced a net gain of $195 million; 10 clients were added.

Seventy percent of research is generated in-house, with 300 stocks followed closely and 3,000, generally.

The firm is an affiliate of Eaton Vance Corp., a holding company.

Clients include Bally, Boise Cascade, U.S. Chamber of Commerce and Maryland Retirement System.

The chief investment officer is James B. Hawkes, vice president and director. Client contact is John H. Wise Jr., vice president.

Dale K. Ehrhart Inc.

101 W. Venice Ave., Suite 33, Venice, Fla. 33595; (813) 485-5467

Total assets managed	$114,000,000
Tax-exempt assets managed	$35,000,000
Minimum separate account	$100,000
Tax-exempt clients	295
Types of accounts managed	CEF
No. of portfolio managers	3
Size of research staff	2

Dale K. Ehrhart Inc., an equity manager, uses low p/e and Graham & Dodd analysis to select blue-chip optionable securities and sells calls against those positions.

On Jan. 1, its tax-exempt asset mix was 99% stocks and 1% cash.

The firm is under exclusive contract to R.J. Financial Corp. and subsidiaries.

Chief investment officer is Dale K. Ehrhart, president. Mr. Ehrhart and Thomas B. Trammell, vice president, are client contacts.

Elliott & Page Atlantic Ltd.

Suite 300, 1801 Hollis St., Halifax, Nova Scotia B3J 3N4 (902) 423-9367

Total assets managed	$100,000,000(U.S.)
Tax-exempt assets managed:	
Total	$90,000,000
International assets managed	$9,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	7
Types of accounts managed	CEU
No. of portfolio managers	2
Size of reseaaff	5

Elliott & Page Atlantic Ltd., a Canadian firm, is an equity, fixed-income and balanced manager. Its bottom-up approach to buying growth stocks relies on Graham & Dodd analysis.

The firm uses interest rate anticipation in fixed income, and is not an active trader.

The asset mix Jan. 1 was 40% Canadian stocks, 35% bonds, 15% cash and 10% U.S. stocks.

0% of the firm.
G. Peter Marshall, president, is chief
vestment officer; Robert G. McKim,
ortfolio manager, is client contact.

Elliott & Page Ltd.

uite 1120, 120 Adelaide St. W., Toronto, Ontario M5H 1V1; (416) 365-8300

otal assets managed	$2,885,000,000(U.S.)
ax-exempt assets managed:	
Total	$405,000,000
For subsidiaries of U.S. firms	$20,000,000
inimum separate account	$1,000,000
ax-exempt clients:	
Total	15
U.S. subsidiaries	1
ypes of accounts managed	CEFU
o. of portfolio managers	12

Elliott & Page Ltd., a Canadian firm, anages equity, fixed-income and alanced accounts.

Its managers follow a value-oriented quity approach, with some sector otation and an emerging growth ocus.

Fixed-income portfolio management epends on the firm's outlook for finan- al markets and interest rates. Issue uality and liquidity are emphasized, nd portfolio term is managed in ccordance with the interest rate fore- ast.

Seventy percent of the research is enerated internally, with 100 stocks llowed closely and 200, generally.

Clients include Canadian Press, CR and Brock University.

The parent company is North Ameri- an Life Assurance Co. Elliott & Page's ubsidiaries are Sass, Elliott & Page, ew York, and Elliott & Page Atlantic d., Halifax, Nova Scotia. Parent com- any asse's total $2.9 billion, with tax- xempt assets amounting to $405 mil- on.

Brian Moore, president, is chief vestment officer; Malvin C. Spooner, ce president, is client contact.

Richard Ellis Inc.

50 Park Ave., New York, N.Y. 10022; (212) 355-4810

otal assets managed	$1,816,000,000
ax-exempt assets managed	$1,510,000,000
al estate assets managed	$1,510,000,000
inimum separate account	$30,000,000
ax-exempt clients	8
ypes of accounts managed	CG
o. of portfolio managers	6
ze of research staff	15

Real estate manager Richard Ellis c. acquires fundamentally sound ffice buildings, regional malls and odern industrial properties, focusing markets with sustainable economic owth found in conjunction with con- raints on new development.

On Jan. 1, all tax-exempt assets ere in equity real estate.

In 1985, the firm experienced an 870 million net gain in tax-exempt ssets; two clients were added.

Clients include San Bernardino ounty Employees, Barclays Bank, oyal Dutch Shell and St. Paul asualty.

Chief investment officer is Chris- opher D. Budden, president; client ontact is David R. Hodes, vice presi- ent.

ndowment Management & Research Corp.

7 Franklin St., Boston, Mass. 02110; (617) 357-8480

otal assets managed	$1,585,000,000
ax-exempt assets managed	$1,554,000,000
inimum separate account	$10,000,000
ax-exempt clients	28
ypes of accounts managed	CEFG
o. of portfolio managers	6
ze of research staff	9

rotation in its equity approach, the fund purchases stocks that are about to have a positive change in fundamentals and that remain fairly valued by the market.

In fixed income, sector and quality analyses are the focus for incremental return. A highly disciplined system is used for maturity selection and limited controlled interest rate exposure.

The asset mix Jan. 1 was 67% stocks, 24% bonds and 9% cash.

The firm had a net loss of $45 million in tax-exempt business in 1985; two clients were added.

Ninety percent of research is conducted in-house, with 250 stocks watched closely and 1,100, generally.

Clients include California Institute of Technology, GTE and TRW.

The firm is affiliated with Baring Brothers Ltd., London.

Stephen D. Cutler, executive vice president, is chief investment officer. Client contact is Charles Kaminski, vice president.

Equitable Bank

100 S. Charles St., Baltimore, Md. 21201; (301) 547-4428

Total assets managed	$886,000,000
Tax-exempt assets managed:	
Total	$160,000,000
Commingled accounts	$38,000,000
Separate accounts	$122,000,000
401(k) and 457 assets managed	$25,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	204
Separate	369
Types of accounts managed	CEFG
No. of portfolio managers	9

Equitable Bank offers equity, fixed-income and balanced accounts.

Sector rotation is used in the equity approach; the bank also uses a relative value orientation.

Managers take a traditional approach to fixed-income investments.

The asset mix Jan. 1 was 70% stocks, 25% bonds and 5% cash.

Clients include Equitable Bancorp., Patuxent Medical Group, Westat and the John F. Kennedy Institute.

Chief investment officer is Lee Seabolt, vice president. Louis K. Nielsen, vice president, is client contact.

Equitable Capital Management Corp.

1285 Avenue of the Americas, New York, N.Y. 10019; (212) 554-2000

Total assets managed	$20,890,000,000
Tax-exempt assets managed	$14,576,000,000
International assets managed	$387,000,000
Passive assets managed	$683,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	7
Types of accounts managed	C
No. of portfolio managers	11
Size of research staff	37

Equitable Capital Management Corp. is a fixed-income manager that focuses on asset liability matching with portfolio optimization, dedicated portfolios, bond immunization, private placements and hedging programs used to implement client needs. Options and fixed-income futures are used.

Of the $14.576 billion in tax-exempt assets under management, $1.065 billion was managed in separate accounts. The remainder was for guaranteed investment contracts, annuities and other general account products sold to fund sponsors by the parent company, Equitable Life Assurance Society of the United States, which reported total sales of $20.7 billion for those products.

Equitable Capital Management oversees $13.51 billion in general account assets backing those products.

The tax-exempt asset mix Jan. 1 was 42% bonds, 2% cash, 14% mortgage-backed securities and 42% private placements.

Equitable Life has total assets of $91 billion. Of that total, $54 billion are tax-exempt.

Chief investment officer is Brian F. Wruble, chairman, president and chief executive officer. Client contact is Frank Savage, executive vice president.

Equitable Investment Management Corp.

1221 Avenue of the Americas, 32nd Floor, New York, N.Y. 10020; (212) 382-8023

Total assets managed	$7,520,000,000
Tax-exempt assets managed	$6,813,000,000
International assets managed	$282,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	24
Types of accounts managed	CFGJ
No. of portfolio managers	13
Size of research staff	8

Equitable Investment Management Corp. is an equity, fixed-income, balanced and international manager.

The equity investment philosophy integrates growth orientation with a value discipline. Flexibility is key; options are used.

In fixed income, the firm manages for value within a client's duration constraints, using interest rate anticipation and sector analysis to enhance return.

The asset mix Jan. 1 was 73% stocks, 9% bonds and 18% cash.

Eighty percent of the research is generated in-house, with 600 stocks followed closely and 900, generally.

The firm is a wholly owned subsidiary of The Equitable Life Assurance Society of the United States, which has total assets under management of $91 billion. Of that, $54 billion are tax-exempt.

Franklin Kennedy III, managing director and portfolio manager, is chief investment officer. Client contact is Anthony P. Wilson, managing director and chief marketing officer.

Equitable Real Estate Investment Management

787 Seventh Ave., 46th Floor, New York, N.Y. 10019; (212) 554-4213

Total assets managed	$22,746,000,000
Tax-exempt assets managed	$14,117,000,000
Real estate assets managed	$4,700,000,000
Minimum separate account	$100,000,000
Tax-exempt clients	272
Types of accounts managed	CGJ
No. of portfolio managers	7

Equitable Real Estate Investment Management Inc. is a real estate manager that seeks attractive, long-term stable rates of return by acquiring equity ownership in diversified, quality, well-located properties with the potential for growth of rental income and value appreciation.

Of the $14.117 billion in tax-exempt assets under management, $4.383 billion was in real estate equity and $316 million was in mortgages. That $4.699 billion was in separate accounts.

The remainder was for guaranteed investment contracts, annuities and other products sold to fund sponsors by the parent company, Equitable Life Assurance Society of the United States, which reported total sales of $20.7 billion for those products. Equitable Real Estate Management and Equitable Capital Management invest general account assets to back those products.

The overall asset mix of the tax-exempt assets overseen by the real estate unit Jan. 1 was 56% equity real estate and 44% mortgages.

Clients include Exxon, Westinghouse, California and Florida.

The parent company had total assets of $91 billion, of which $54 billion are tax exempt.

George R. Puskar, president and chief operating officer, is chief investment officer. Client contact is Joyce R. Frater, senior vice president.

Equitec Institutional Realty Advisers Inc.

7677 Oakport St., Oakland, Calif. 94612; (415) 430-9900

Total assets managed	$70,000,000
Tax-exempt assets managed	$70,000,000
Real estate assets managed	$70,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	12
Types of accounts managed	CGJ

Real estate manager Equitec Institutional Realty Advisers Inc. acquires

25 largest GIC managers

Rank	Managers	$ millions
1.	Metropolitan Life Insurance	14,000
2.	Equitable Life Assurance Society	13,596
3.	Aetna Life and Casualty	11,691
4.	Travelers Companies	8,000
5.	Prudential Asset Management Group	7,327
6.	John Hancock Financial Services	5,850
7.	New York Life Insurance	3,979
8.	Bankers Life	2,300
9.	Provident National Assurance	2,097
10.	New England Mutual Life Insurance	2,071
11.	CIGNA	1,800
12.	Massachusetts Mutual Life Insurance	1,791
13.	Continental Assurance	1,269
14.	Mutual Benefit Life	1,176
15.	Crown Life Insurance - U.S. Pensions	1,175
16.	PM Capital Advisors	1,092
17.	Union Mutual Life Insurance	1,071
18.	Connecticut Mutual Life Insurance	1,035
19.	Lincoln National Life Insurance	1,017
20.	State Mutual Life Assurance	801
21.	Phoenix Mutual Life Insurance	584
22.	General American Life Insurance	431
23.	Hartford Life Insurance Companies	430
24.	Penn Mutual Life Insurance	267
25.	Union Labor Life Insurance	251
	TOTAL	85,101

basis.

All tax-exempt assets were invested in equity real estate as of Jan. 1.

The firm had a net gain of $40 million in new tax-exempt business in 1985. Seven clients were added.

The firm is a wholly owned subsidiary of Equitec Financial Group Inc.

Kenneth E. Nitzberg, president, is chief investment officer. Client contact is Don Jackson, vice president.

Essex Investment Management Co. Inc.

10 Post Office Square South, Boston, Mass. 02109; (617) 482-4870

Total assets managed	$1,121,000,000
Tax-exempt assets managed	$775,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	70
Types of accounts managed	CEF
No. of portfolio managers	5
Size of research staff	8

Essex Investment Management Co. Inc., primarily an equity manager, uses a top-down approach to focus on sectors/industries that are undergoing favorable earnings increases, with p/e ratio relative to estimated earnings growth rate the single most important selection criterion.

The firm is a risk-averse, fixed-income manager, basing its approach on interest rate anticipation.

The asset mix Jan. 1 was 86.7% stocks, 7.3% bonds and 6% cash.

The firm experienced a net loss in tax-exempt assets in 1985 of $144 million. Four clients were added.

All of the research is generated in-house, with 80 to 100 stocks followed closely and 150, generally.

Joseph C. McNay, chairman and president, is chief investment officer. Client contact is C. Michael Hazard, executive vice president.

Estabrook Capital Management

430 Park Ave., New York, N.Y. 10022; (212) 319-4343

Total assets managed	$700,000,000
Tax-exempt assets managed	$450,000,000
401(k) and 457 assets managed	$8,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	148
Types of accounts managed	CEFJ
No. of portfolio managers	8

Estabrook Capital Management is a balanced manager.

It selects equity investments based on projections of total returns over a stock market cycle. The firm emphasizes potential growth in earnings and restricted to guaranteed issues and to corporate and municipal issues rated A or higher.

The asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

The firm experienced a $60 million net gain in new tax-exempt business in 1985; 11 clients were added.

Clients include Chevron, TWA, Noyes Foundation, and South Carolina E&G.

Charles T. Foley, president, is chief investment officer. Client contact is William C. Petty III, executive vice president.

European-American Securities Inc.

333 Market St., Suite 3200, San Francisco, Calif. 94105; (415) 982-5200

Total assets managed	$7,000,000
Tax-exempt assets managed	$0
Minimum separate account	$1,000,000
No. of portfolio managers	2

European-American Securities Inc., an equity manager, emphasizes growth stocks in its approach.

Half of the research is generated internally, with 10 stocks followed closely and 50, generally.

Lawrence E. Nerheim, chairman, is chief investment officer and client contact.

Evans & Moxon Capital Management Inc.

19 S. Main St., Yardley, Pa. 19067; (215) 493-0500

Total assets managed	$94,000,000
Tax-exempt assets managed	$84,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	17
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	1

Evans & Moxon Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes medium-sized growth companies within industries experiencing above-average growth.

In fixed income, the objective is to better market return by two to three percentage points annually through yield curve and yield spread analysis.

The tax-exempt asset mix Jan. 1 was 67% stocks, 24% bonds and 9% cash.

The firm had a net gain of $38 million in 1985 in new tax-exempt busi-

f

Farmer & Lang Inc.

8307 Dunwoody Place, Atlanta, Ga. 30338; (404) 993-4181

Total assets managed	$110,000,000
Tax-exempt assets managed	$71,000,000
Minimum separate account	$100,000
Tax-exempt clients	224
Types of accounts managed	CEFJ
No. of portfolio managers	3
Size of research staff	3

Farmer & Lang Inc. is an equity manager whose approach is based on low p/e, Graham & Dodd and market timing.

The mix of tax-exempt assets as of Jan. 1 was 85% stocks and 15% cash.

In 1985, the firm had a net gain in new tax-exempt business of $30 million; 100 clients were added.

All research is generated internally, with 30 stocks followed closely and 300, generally.

Robert B. Lang, president, is chief investment officer and client contact.

Favia Hill & Associates

30 Rockefeller Plaza, New York, N.Y. 10112; (212) 621-2892

Total assets managed	$5,454,000,000
Tax-exempt assets managed	$5,454,000,000
International assets managed	$100,000,000
Passive assets managed	$130,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	141
Types of accounts managed	CEFGJ
No. of portfolio managers	14
Size of research staff	5

Favia Hill & Associates offers equity, fixed-income, balanced and international capabilities.

In equities, the firm is a growth manager, emphasizing early identification of secular change. It relies on large-cap, high-quality companies showing identifiable, secular change.

It is an active fixed-income manager, emphasizing high quality with average maturity within two years of the average maturity of the Shearson Lehman Government/Corporate bond index.

Stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 40% stocks, 58% bonds and 2% cash.

The firm experienced a net loss of $2.8 billion in 1985; five tax-exempt clients were gained.

Half of the research is generated internally, with 200 stocks followed closely and 500, generally.

Clients include AT&T, Los Angeles City Employees, American Cancer Society and Rutgers University.

The firm is a subsidiary of Chemical New York Corp.

Kenneth Rolland, chairman, is chief investment officer. Client contact is Erich G. Weissenberger Jr., director of marketing.

Federated Investment Counseling Inc.

421 Seventh Ave., Pittsburgh, Pa. 15219; (412) 288-6568

Total assets managed	$349,000,000
Tax-exempt assets managed	$334,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	24
Types of accounts managed	CEFG
No. of portfolio managers	5
Size of research staff	4

Federated Investment Counseling Inc. is an equity, fixed-income and balanced manager.

It is a value-oriented equity manager concentrating in large-cap, high-quality stocks with a moderate asset allocation decision.

Interest rate anticipation is applied to fixed-income accounts, which are managed based on duration with a range between three and five years.

The asset mix Jan. 1 was 37% stocks, 49% bonds and 14% cash.

Clients include Titanium Metals, IC Industries, M.A. Hanna and Rockwell.

Federated Investment Counseling is a subsidiary of Federated Investors Inc., which is owned by Aetna Life & Casualty Co.

The chief investment officer is Henry J. Gailliot, president; the client contact is James H. O'Leary, vice president.

Fenner & Williams

812 Gravier St., New Orleans, La. 70112; (504) 581-6288

Total assets managed	$38,000,000
Tax-exempt assets managed	$15,000,000
Minimum separate account	$100,000
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	2

Fenner & Williams, a balanced manager, uses low p/e and Graham & Dodd techniques in its equity approach and interest rate anticipation in its fixed-income approach.

It follows 150 stocks closely.

The chief investment officer is D.C. Fenner. Client contact is Frank A.M. Williams.

Ferguson & Wellman Inc.

1001 S.W. Fifth Ave., Suite 1919, Portland, Ore. 97204; (503) 226-1444

Total assets managed	$440,000,000
Tax-exempt assets managed	$400,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	75
Types of accounts managed	CEFGJ
No. of portfolio managers	5

Ferguson & Wellman Inc., a balanced manager, uses low p/e, sector rotation and Graham & Dodd for its equity approach. Covered options are used. Bond investments are made from a cyclical and secular forecast of interest rates.

The asset mix Jan. 1 was 50% stocks, 45% bonds and 5% cash.

The firm had a net gain of $25 million in tax-exempt business in 1985; 18 clients were added.

One-fourth of the research is generated internally; 40 stocks are watched closely and 150, generally.

Clients include the Archdiocese of Oregon, Oregon & Washington Carpenters and Metropolitan Hospitals.

The chief investment officers are Norbert J. Wellman, chairman, and Joseph Fergerson, president. James H. Rudd, vice president, is client contact.

Ferris Investment Advisory

1720 Eye St. N.W., Washington, D.C. 20006; (202) 429-3658

Total assets managed	$140,000,000
Tax-exempt assets managed	$65,000,000
Minimum separate account	$300,000
Tax-exempt clients	25
Types of accounts managed	CEFJ
No. of portfolio managers	4
Size of research staff	2

Ferris Investment Advisory is an equity and balanced manager.

Its equity approach is value-oriented, selecting stocks with low p/e, above-average dividends and improving fundamentals.

The fixed-income approach is passive, using short- to intermediate-term government and AA rated or better corporate securities.

The tax-exempt asset mix Jan. 1 was 55% stocks, 35% bonds and 10% cash.

The firm had a net gain of $9 million in new tax-exempt business in 1985; two clients were added.

Clients include Sibley Hospital and Waynesboro Hospital.

The firm is a department of Ferris and Co.

Chief investment officer is Daniel G. Shannon. David H. Cunningham, vice president, is the client contact.

F.I.A. Associates

1601 Response Road, Suite 300, Sacramento, Calif. 95815; (916) 920-4051

Total assets managed	$1,565,000,000
Tax-exempt assets managed	$1,565,004,000
Real estate assets managed	$1,520,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	5
Types of accounts manag.	GJ

F.I.A. Associates is a real estate manager that develops portfolios of institutional-quality real estate. Portfolios are well diversified as to location, property types and investment types, achieving maximum yield through detailed asset management.

The asset mix Jan. 1 was 3% cash, 30% equity real estate, 49% mortgages and 18% debt/equity real

Courtesy of the Baseball Hall of Fame, Cooperstown, NY

We don't try for home runs either.

His name was Wee Willie Keeler, baseball's greatest place-hitter. Standing no taller than the batboy, his lifetime average of .345 remains today as one of the highest in baseball history. Yet in 17 seasons he managed to hit only 32 home runs. Some people say he never meant to hit any.

His approach to baseball was simple. Rather than go for the long ball, he just "hit 'em where they ain't." The result: 3 batting titles, an all-time major league record for most singles in a season with 202, and an entire season (564 at bats) without striking out once.

At Rampart, we don't try for homeruns either. Instead, we emphasize low risk, highly consistent returns, making use of option/equity skills that we've been developing for over a decade.

Unlike Wee Willie, we at Rampart will never make it to Cooperstown. But in our business, performance, not fame, is the name of the game.

RAMPART INVESTMENT MANAGEMENT COMPANY, INC.

Providing unique option/equity programs for Institutional Investors.

Exchange Place, Boston 02109 (617) 742-7400

Courtesy of the United States Golf Association

We don't try for long shots either.

His name was Walter Travis, the "Old Man" of golf. Though he did not pick up a bag of clubs until age 35, four years later he was among the most successful golfers in the world. His secret: Short, accurate drives and flawless putting.

This simple strategy helped him win every major amateur title in golf, including three times as National Champion, four times as Metropolitan Champion and once as winner of the prestigious British Amateur Tournament, the first non-British golfer ever to do so.

At Rampart, we don't try for long shots either. Instead, we emphasize low risk, highly consistent returns, making use of investment skills and options/futures hedging techniques that we've been developing for over a decade.

Unlike "Old Man" Travis, we at Rampart will never win national golf titles. But in our business, as in golf, consistency wins every time.

RAMPART INVESTMENT MANAGEMENT COMPANY, INC.

Providing unique option/equity programs for Institutional Investors.

Exchange Place, Boston 02109 (617) 742-7400

We don't try for aces either.

In an era when the overhand serve was still a thing of the future, Richard Sears reigned as King of the Court.

A slight, unlikely looking athlete, Sears made up for his lack of size by developing one of the most consistent ground games in tennis. The key to winning, he believed, was to keep the ball in play until either the opponent erred or until he had an opportunity at a put-away.

So superior was he to his contemporaries that from age 19 to 26, he never lost a single match, capturing the first seven U.S. Championships.

At Rampart, we don't rely on aces either. Instead, we emphasize low risk, highly consistent performance in the equity and fixed income markets, employing investment skills and options/futures hedging techniques that we've been developing for over a decade.

Unlike Richard Sears, we at Rampart will never win national titles. But in our business, as in tennis, consistency and patience are the name of the game.

RAMPART INVESTMENT MANAGEMENT COMPANY, INC.

Providing unique hedged investment programs for Institutional Investors.

Exchange Place, Boston 02109 (617) 742-7400

- **Hedged Equity & Fixed Income**
  Highly consistent performance employing options and futures
- **Surplus Growth Capture©**
  Excess equity returns through systematic rebalancing
- **Index Fund Management**
  Innovative index portfolios for unique applications

So what do we do?

- **Dynamic Option Overwriting**
  Incremental income on existing equity portfolios
- **Systematic Portfolio Protection©**
  Risk control of equity & fixed income portfolios
- **Corporate Cash Management**
  Tax advantaged returns from hedged equities

To find out what these services can do for you, call David R. Fraley, Managing Director, Rampart Investment Management Company Inc. at (617) 742-7400.

estate.

F.I.A. Associates is a wholly owned subsidiary of Merabank, a federal savings bank.

Clients include California Employees, Utah Retirement and Texas Teachers.

Norm LaMar, executive vice president, is chief investment officer. Client contacts are Vern Bennett, executive vice president, and Jim Sublett, senior executive vice president.

Fidelity Bank

Broad and Walnut Streets, Philadelphia, Pa. 19109; (215) 985-6000

Total assets managed	$3,985,000,000
Tax-exempt assets managed	$1,363,060,000
Minimum separate account	$1,000,000
Tax-exempt clients	369
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	5

Fidelity Bank is an equity, fixed-income, balanced and special equity (using arbitrage pricing theory) manager.

Its equity approach uses fundamental analysis, seeking change in company, industry or economic conditions. Options are used.

In fixed income, the firm is active and aggressive, using strict economic disciplines when determining when to lengthen or shorten maturity structures.

The asset mix Jan. 1 was 57% stocks, 36% bonds, 6% cash and 1% mortgages.

Options are used.

Clients include Pennsylvania Municipal Retirement System, IBEW No. 98, Teamsters Joint Council No. 53 and AMAX.

Latimer & Buck is a wholly owned real estate subsidiary.

David Orr, senior vice president, is chief investment officer. Alan T. Yuhas, vice president, is client contact.

Fidelity International Investment Advisors Ltd.

68 Devonshire St., Boston, Mass. 02109; (617) 570-6330

Total assets managed	$1,688,000,000
Tax-exempt assets managed	$1,688,000,000
International assets managed	$1,500,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	24
Types of accounts managed	CF
No. of portfolio managers	14
Size of research staff	15

Fidelity International Investment Advisors Ltd. is an equity manager whose approach is not limited to one style and varies by portfolio manager.

The asset mix Jan. 1 was 95% stocks and 5% cash.

Seventy percent of research is generated internally, with 450 stocks followed generally.

The firm experienced a net gain in new tax-exempt business in 1985 of $65 million. Two tax-exempt clients were added.

Clients include GTE, Xerox, Sun Co. and GM.

The firm is a subsidiary of Fidelity International Ltd.

Walter L. Downey, senior investment officer, is chief investment officer. Client contact is William B. Fink, vice president.

Fidelity Investments

82 Devonshire St., Boston, Mass. 02109; (617) 570-4700

Total assets managed	$36,662,000,000
Tax-exempt assets managed	$2,200,000,000
401(k) and 457 assets managed	$2,200,000,000
Tax-exempt clients	3,200
Types of accounts managed	CEFG
No. of portfolio managers	45
Size of research staff	26

Fidelity Investments is primarily an equity manager that had all of its tax-exempt assets in 401(k) and 457 savings plans as of Jan. 1.

Managers take three equity approaches: income-managed characterized by high yield, low p/e and below-market beta; earnings growth characterized by superior long-term earnings growth and near-term earnings momentum; and small-company growth characterized by earnings growth and small market capitalization.

Its fixed-income approach is active.

The firm netted $900 million in new tax-exempt business in 1985.

The firm is a subsidiary of FMR Corp.

Chief investment officer is J. Gary Burkhead, president, Fidelity Management & Research Co. Client contact is Bradford K. Gallagher, president, Fidelity Investments Institutional Services Co.

Fidelity Management Trust

82 Devonshire St., Boston, Mass. 02109; (617) 570-6902

Total assets managed	$3,338,000,000
Tax-exempt assets managed:	
Total	$3,253,000,000
Commingled	$920,000,000
Separate	$2,333,000,000
International assets managed	$90,000,000
Minimum separate account	$25,000,000
Tax-exempt clients:	
Commingled	29
Separate	38
Types of accounts managed	CEFGJ
No. of portfolio managers	11
Size of research staff	34

Fidelity Management Trust Co. is an equity manager using three primary disciplines: income-managed, characterized by high-yield, low p/e and below-market beta; earnings growth, characterized by superior long-term earnings growth and near-term earnings momentum; and small-company growth, characterized by superior earnings growth and small market capitalization.

The asset mix Jan. 1 was 84.5% stocks, 9.7% bonds and 5.8% cash.

The trust company is a subsidiary of FMR Corp., the parent company of affiliated Fidelity Companies, with total assets of $40 billion. Of that total, $5 billion are tax-exempt.

Richard T. O'Rourke and Frank T. Parrish, executive vice presidents, are chief investment officers. Client contact is Edward E. Madden, executive vice president.

Fiduciary & Corporate Counsel

4800 Dow Ridge Road, Orchard Lake, Mich. 48033; (313) 681-1644

Total assets managed	$10,000,000
Tax-exempt assets managed	$7,000,000
Tax-exempt clients	14
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Fiduciary & Corporate Counsel, an equity and balanced manager, bases its equity approach on sector rotation and market timing using computer-derived models.

It uses interest rate anticipation for fixed income.

The chief investment officer and client contact is Robert F. Fera, president.

Fiduciary Counsel Inc.

40 Wall St., New York, N.Y. 10005; (212) 344-6400

Total assets managed	$515,000,000
Tax-exempt assets managed	$112,000,000
Minimum separate account	$500,000
Tax-exempt clients	30
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	5

Fiduciary Counsel Inc. is primarily an equity manager that applies various investment strategies to provide customized service to clients.

The asset mix Jan. 1 was 80% stocks, 15% bonds and 5% cash.

Clients include the Third Presbyterian Church, Pennsylvania; Clinical Associates; Pittsburgh Presbytery; and General Computer Interfaces.

Chief investment officer is Andrew E. Beer, president. Jack R. Orben, chairman, is client contact.

Fiduciary Management Associates

135 S. LaSalle St., Suite 3310, Chicago, Ill. 60603; (312) 930-6850

Total assets managed	$410,000,000
Tax-exempt assets managed	$348,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	78
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	6

Fiduciary Management Associates is an equity, fixed-income and balanced manager.

In equities, the firm is a top-down, macroeconomic manager investing in well-managed, value-oriented companies.

It is an active bond manager with a top-down approach, varying sector exposure and taking advantage of interest rate and yield spread changes.

The firm recently formed a closed-end real estate program for pension funds, American Income Property Trust, with Arthur Rubloff.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

The firm had a net gain of $32 million in 1985 in new tax-exempt business; 15 clients were added.

Philip Arnold, president, is chief investment officer. Client contact is Robert F. Carr III, chairman of the board.

Fiduciary Trust Co. of New York

2 World Trade Center, New York, N.Y. 10048; (212) 466-4100

Total assets managed	$11,216,000,000
Tax-exempt assets managed:	
Total	$8,823,000,000
Separate accounts	$8,823,000,000
Real estate assets managed	$488,000,000
International assets managed	$2,471,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	149
Types of accounts managed	CEFGJ
No. of portfolio managers	16
Size of research staff	10

Fiduciary Trust Co. of New York is an equity, fixed-income, balanced and international manager and real estate consultant.

In equities, the bank uses worldwide economic analyses to structure portfolios, with a top-down approach to determine industry weightings and a bottom-up research approach to select securities.

In fixed income, the bank is an intermediate, high-quality manager that actively manages portfolios on the basis of flexible, international strategies.

The asset mix Jan. 1 was 50% stocks, 41% bonds, 3% cash, 5% equity real estate and 1% mortgage-backed securities.

Sixty-five percent of the research is generated internally, with 400 stocks followed closely and 400, generally.

Clients include Arizona, NFL Reciprocal Trust, Central States and Red Cross.

Jeremy H. Biggs, executive vice president, is chief investment officer. Client contact is Preston S. Smith, vice president.

The Fields Investment Group

P.O. Box 680370, Park City, Utah 84123; (801) 649-1304

Total assets managed	$50,000,000
Tax-exempt assets managed	$40,000,000
Minimum separate account	$100,000
Tax-exempt clients	7
Types of accounts managed	CJ
No. of portfolio managers	3
Size of research staff	2

The Fields Investment Group, a balanced manager, relies on market timing in its equity approach, using in-depth, fundamental analysis, quantitative analysis of valuation and macro evaluation analysis of the level of the market relative to economic prospects.

Quality, interest rate forecasting and positioning on the yield curve are key elements to the fixed-income approach.

The asset mix Jan. 1 was 45% stocks, 20% bonds and 35% cash.

Randall K. Fields, president, is chief investment officer. Client contact is Clifford D. White, vice president.

The Fifth Third Bank

38 Fountain Square Plaza, Cincinnati, Ohio 45263; (513) 579-4314

Total assets managed	$2,896,000,000
Tax-exempt assets managed:	
Total	$1,372,000,000
Commingled accounts	$102,000,000
Separate accounts	$1,270,000,000
401(k) and 457 assets managed	$12,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	260
Separate	219
Types of accounts managed	CEFJ
No. of portfolio managers	12

The Fifth Third Bank offers equity, fixed-income and balanced capabilities.

The managers specialize in high-quality, underrecognized and institutionally underowned common stocks. Characteristics of the approach are low p/e, low market/book, low debt/equity and above-average dividend yield.

The fixed-income approach minimizes total portfolio volatility; portfolios consist of about 60% in Treasury/agency bonds with maturities of five to seven years and a minimum quality of A and weighted average quality of AA.

The asset mix Jan. 1 was 70% stocks, 25% bonds and 5% cash.

Clients include Sisters of Mercy, Children's Hospital Research, Sisters of Charity and Cincinnati Gas & Electric.

Five percent of research is generated in-house, with 250 stocks followed closely and 1,000, generally.

George Gibbs, vice president, is chief investment officer. Client contact is Timothy J. Lysaght, senior trust officer.

Financial Aims Corp.

Davidson Building, Box 5016, Great Falls, Mont. 59403; (406) 727-6111

Total assets managed	$68,000,000
Tax-exempt assets managed	$46,000,000
Minimum separate account	$200,000
Tax-exempt clients	96
Types of accounts managed	CEFG
No. of portfolio managers	1
Size of research staff	1

Financial Aims Corp. is a balanced manager that uses growth stock, low p/e and MPT techniques to select stocks and interest rate anticipation to select bonds.

The mix of tax-exempt assets Jan. 1 was 60% stocks, 35% bonds and 5% cash.

The firm had a net gain of $11 million in new tax-exempt business in 1985; 15 clients were added.

Fifty percent of research is generated internally, with 60 stocks followed closely and 110, generally.

Financial Aims Corp. is a wholly owned subsidiary of D.A. Davidson & Co.

The chief executive officer and client contact is William S. MacFadden Jr.

Financial Trust Co.

6312 S. Fiddler's Green Circle, Englewood, Colo. 80111; (303) 779-1233

Total assets managed	$76,000,000
Tax-exempt assets managed	$76,000,000
401(k) and 457 assets managed	$4,500,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	8
Size of research staff	1

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ager, has a rotational industry emphasis based on strong earnings. It uses sector analysis for fixed-income.

The asset mix Jan. 1 was 84% stocks, 8% bonds and 8% cash.

Financial Trust Co. is a wholly owned subsidiary of Financial Programs Inc., which is a subsidiary of Britannia Arrow Holdings PLC.

The chief investment officer is Josiah J. Willard III, senior vice president-director of investment research. Kenneth J. Ruder, vice president, is client contact.

First of America Investment Management

5052 Sprinkle Road, P.O. Box 4034, Kalamazoo, Mich. 49003; (616) 383-9200

Total assets managed	$1,081,000,000
Tax-exempt assets managed:	
Total	$691,000,000
Commingled accounts	$300,000,000
Separate accounts	$391,000,000
Real estate assets managed	$33,000,000
International assets managed	$45,000,000
Minimum separate account	$2,500,000
Tax-exempt clients:	
Commingled	205
Separate	57
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	2

First of America Investment Management is an equity, fixed-income and balanced manager. The equity approach is disciplined and value-oriented with an emphasis on stock selection using a proprietary computer model. A low p/e universe multidimensionally is ranked and scored on value, earnings momentum and projected growth.

For fixed income, a disciplined, value-oriented approach is used with emphasis on security selection, which relies on screening security and issuer characteristics.

The Jan. 1 tax-exempt asset mix was 65% stocks, 30% bonds and 5% mortgages.

First of America Investment Management acquired Securities Counsel Inc. of Jackson, Mich.

Chief investment officer is J. Russell Leonard, vice president. Client contact is Elyse Essick, assistant vice president.

First Asset Management

First Bank Place East, Minneapolis, Minn. 55480; (612) 370-4743

Total assets managed	$2,042,000,000
Tax-exempt assets managed	$1,581,000,000
Real estate assets managed	$81,000,000
Passive assets managed	$89,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	17
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	6

First Asset Management is an equity, fixed-income, balanced, real estate, international and options manager.

It offers three equity styles: core, aggressive and regional. Stock selection and market timing are emphasized, using growth stocks and sector rotation.

The fixed-income approach is tied to interest rate forecasting within a framework for measuring and controlling both systematic and specific risks in the portfolio.

In real estate, managers employ a value-added approach, selecting properties whose values can be enhanced through application of aggressive management and additional capital.

The Jan. 1 tax-exempt asset mix was 26.5% stocks, 33% bonds, 27% cash, 3% equity real estate, 2% mortgage-backed securities and 8.5% GICs.

Clients include Federal Express, General Mills and Pillsbury.

The firm is a wholly owned subsidiary of First Bank System.

John M. Murphy Jr. and Richard W. Jensen, managing directors, are chief investment officers. Client contact is Jackson L. Allen Jr., director of marketing.

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

First Boston Asset Management Corp.

12 E. 49th St., New York, N.Y. 10017; (212) 909-4525

Total assets managed	$508,000,000
Tax-exempt assets managed	$67,000,000
401(k) and 457 assets managed	$33,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	4
Types of accounts managed	C
No. of portfolio managers	3

First Boston Asset Management Corp. takes a low p/e approach to equities and a quantitative approach to fixed income.

The tax-exempt asset mix Jan. 1 was 32.5% stocks, 56.4% bonds and 11.1% cash.

The firm had a $52.1 million net gain in new tax-exempt business in 1985; three clients were added.

First Boston Asset Management Corp. is a wholly owned subsidiary of The First Boston Corp.

The chief investment officer and client contact is Michael F. Holland, president and chief executive officer.

First Chicago Investment Advisors

3 First National Plaza, Chicago, Ill. 60670; (312) 732-6474

Total assets managed	$7,160,000,000
Tax-exempt assets managed	$7,160,000,000
Real estate assets managed	$789,000,000
International assets managed	$1,370,000,000
Passive assets managed	$341,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	276
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	72

First Chicago Investment Advisors is a multiple asset class manager.

Its equity approach is value-oriented, based on fundamental research. It identifies mispriced securities in shifting market environments, selecting stocks within the context of disciplined judgments on market timing, sector exposures and industry.

For fixed income, a portfolio's interest rate, yield curve, quality/sector and issue-specific exposures are managed so as to outperform a benchmark (reflecting clients' objectives and tolerances) during an interest rate cycle.

It believes in building core real estate portfolios of general-purpose properties in proven markets diversified by type and region.

The mix of tax-exempt assets Jan. 1 was 15% stock, 32% bonds, 17.4% cash, 11% equity real estate, 19.5% international, 1.1% venture capital and 4% Multi-Asset Portfolio.

First Chicago Investment Advisors is a wholly owned subsidiary of First Chicago Corp.

The chief investment officer is Gary P. Brinson, president. Client contact is Calvin J. Pedersen, vice president and managing director-account management.

Real estate advisers: Sept. 15.

First City Bank of Dallas-Trust Division

First City Center, P.O. Box 661700, Dallas, Texas 75266-1700; (214) 939-8401

Total assets managed	$100,000,00
Tax-exempt assets managed:	
Total	$50,000,00
Commingled accounts	$8,000,00
Separate accounts	$42,000,00
Minimum separate account	$500,00
Types of accounts managed	CEFG
No. of portfolio managers	
Size of research staff	

First City Bank of Dallas offers equity, fixed-income and balanced capabilities.

Organized fundamental security analysis and value relationships are the backbone of the equity investment approach. Timing and flexible strategy also are emphasized.

In fixed income, managers use an intermediate core system of active management of government and corporate securities with a maximum maturity of 10 years. Average maturity is determined by the interest rate fore

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cast.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

The firm is affiliated with First Financial Advisors.

John E. Davidson, senior vice president and senior trust investment officer, is chief investment officer. Client contact is Keith L. Griffitts, vice president and manager-trust marketing.

First City National Bank of Houston

P.O. Box 809, Houston, Texas 77001; (713) 658-7264

Total assets managed	$1,464,000,000
Tax-exempt assets managed:	
Total	$606,000,000
Commingled accounts	$129,000,000
Separate accounts	$477,000,000
401(k) and 457 assets managed	$20,000,000
Passive assets managed	$15,000,000
Tax-exempt clients:	
Commingled	9
Separate	94
Types of accounts managed	CF
No. of portfolio managers	7
Size of research staff	6

First City National Bank of Houston offers equity, fixed-income, balanced, special equity, oil and gas and futures capabilities.

In equities, the sector weighting decision is based on a 12-month economic outlook after which companies are screened based on fundamentals, earnings growth and relative price momentum.

Bond portfolios are structured around the duration of the Shearson Lehman index with small variations, according to rate anticipation. Treasury bond futures and options are used.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

Clients include Houston Post, Atwood Oceanics, Shell Oil and Zapata.

Ted E. Davis, senior vice president and chief trust investment officer, is chief investment officer and client contact.

First Commercial Bank

P.O. Box 1471, Little Rock, Ark. 72203; (501) 378-3122

Total assets managed	$1,074,000,000
Tax-exempt assets managed:	
Total	$820,000,000
Commingled accounts	$60,000,000
Separate accounts	$760,000,000
401(k) and 457 assets managed	$1,000,000
Tax-exempt clients:	
Commingled	75
Separate	64
Types of accounts managed	CEFGJ
No. of portfolio managers	3

First Commercial Bank offers equity, fixed-income and balanced capabilities.

The equity approach emphasizes total return growth with consistent records of increased earnings and dividends. Market timing is used.

Fixed-income portfolios stress high-quality securities (Treasuries, agencies, AA and above). Maximum maturity is six years.

The tax-exempt asset mix Jan. 1 was 55% stocks, 38% bonds and 7% cash.

Clients include Arkansas State Teachers Retirement System and Affiliated Foods.

The bank is affiliated with Evaluation Associates Investment Management Co., Westport, Conn.

Chief investment officer and client contact is Tom D. Dalby, vice president and manager of trust investments.

First Fidelity Bank, New Jersey

765 Broad St., Newark, N.J. 07101; (201) 430-4693

Total assets managed	$4,000,000,000
Tax-exempt assets managed	$1,800,000,000
International assets managed	$1,000,000
Minimum separate account	$250,000
Types of accounts managed	CEFG
No. of portfolio managers	21
Size of research staff	8

First Fidelity Bank, New Jersey is an equity, fixed-income, balanced and international manager.

Its equity approach is value-oriented; the intent is to keep risk relatively low while awaiting improving earnings and/or recognition of asset value.

Interest rate anticipation and sector analysis are used in fixed income. The firm has a quality orientation, seeking consistent results over time.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

Clients include Foster Wheeler and Warner-Lambert.

Chief investment officer is Robert H. Dunker, executive vice president.

First Interstate Bank of California

707 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-3133

Total assets managed	$3,671,000,000
Tax-exempt assets managed:	
Total	$2,090,000,000
Commingled accounts	$431,000,000
Separate accounts	$1,659,000,000
Real estate assets managed	$10,000,000
International assets managed	$10,000,000
Passive assets managed	$49,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	622
Separate	475
Types of accounts managed	CEFGJ

First Interstate Bank of California is an equity, fixed-income, balanced, real estate, international and guaranteed investment contract manager.

The bank offers active and passive management equity management.

Its fixed-income approach seeks to capture high levels of income and to exploit a broad range of market inefficiencies using sector balancing and undervalued security holding.

In real estate, equity investments are acquired in institutional-quality properties in diverse metropolitan areas that have historically demonstrable patterns of growth in employment, population and disposable income.

The asset mix Jan. 1 was 79% stocks, 6.4% bonds, 2.75% cash, 0.02% equity real estate, 0.02% mortgages, 4.2% mortgage-backed securities and 7.61% other.

The bank has $21.7 million in equity index funds and $27.2 million in bond index funds.

Client contact is John Mason, vice president and manager-business trust and investment services, sales and marketing.

First Interstate Bank of Denver

633 17th St., Denver, Colo. 80270; (303) 293-2211

Total assets managed	$2,869,000,000
Tax-exempt assets managed:	
Total	$1,722,000,000
Commingled accounts	$242,000,000
Separate accounts	$1,480,000,000
Real estate assets managed	$8,000,000
401(k) and 457 assets managed	$63,000,000
Tax-exempt clients:	
Commingled	100
Separate	50
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	8

First Interstate Bank of Denver is an equity, fixed-income and balanced manager. Offering three distinct equity funds, the bank bases its approach on growth stocks and low p/e. Its two fixed-income funds rely on sector analysis.

The mix of tax-exempt assets Jan. 1 was 66% stocks, 16% bonds, 12% cash, 0.1% equity real estate, 0.3% mortgages and 5.6% miscellaneous.

Among its clients are Denver Rio Grande, Gates Learjet, Ideal Basic Industries and Colorado Community Foundation.

Seventy percent of research is generated internally, with 130 stocks followed closely and 200, generally.

First Interstate Bank of Denver is affiliated with Denver Investment Advisors Inc.

Ken Penland, chairman of the board of Denver Investment Advisors, is chief investment officer. Joe Bicknell, trust officer, is client contact.

25 largest international managers ranked by U.S. tax-exempt assets

Rank	Managers	$ millions
1.	J.P. Morgan Investment	3,176
2.	Fiduciary Trust Co. of New York	2,471
3.	Chase Investors Management	2,148
4.	Morgan Grenfell Investment Services	2,075
5.	Capital Guardian Trust	1,906
6.	Fidelity International Investment Advisors	1,500
7.	Rowe Price-Fleming International	1,382
8.	First Chicago Investment Advisors	1,370
9.	State Street Bank & Trust	957
10.	Batterymarch Financial Management	909
11.	Grantham, Mayo, Van Otterloo & Co.	896
12.	Baring International Investment	819
13.	G.T. Capital Management	758
14.	Templeton International	650
15.	N.M. Rothschild International Asset Management	578
16.	Schroder Capital Management International	557
17.	BA Investment Management International	509
18.	Prudential Asset Management Group	487
19.	Mellon-Pictet International Management	439
20.	PCM International	422
21.	Fischer, Francis, Trees & Watts	400
22.	Putnam Advisory	368
23.	Equitable Capital Management	367
24.	Nomura Capital Management	345
25.	Travelers Companies	342
	TOTAL	25,831

First Interstate Bank of Oregon Trust Financial Services Group

1300 S.W. Fifth Ave., Portland, Ore. 97201; (503) 225-2379

Total assets managed	$1,600,000,000
Tax-exempt assets managed:	
Total	$823,000,000
Commingled accounts	$105,000,000
Separate accounts	$718,000,000
Real estate assets managed	$25,000,000
401(k) and 457 assets managed	$15,000,000
Minimum separate account	$2,000,000
Tax-exempt clients:	
Commingled	125
Separate	50
Types of accounts managed	CEFGJ
No. of portfolio managers	12
Size of research staff	3

First Interstate Bank of Oregon Trust Financial Services Group is an equity, fixed-income, balanced, real estate and international manager.

Equity portfolios are very low p/e, low risk, low beta and high yield.

The firm's passive fixed-income approach focuses on the intermediate sector of the bond market; average maturity will range from five to 12 years.

The tax-exempt asset mix Jan. 1 was 48% stocks, 42% bonds, 2% mortgages and 8% mortgage-backed securities.

Eighty percent of research is generated internally, with 80 stocks followed closely and 120, generally.

Clients include Conrac, Georgia-Pacific, Louisiana Pacific and Northwestern Natural Gas.

Chief investment officer is Dennis Wood, vice president and manager-pension investment and advisory services. Client contact is Jan M. Dawson, sales manager.

First Interstate Investment Advisers

P.O. Box 15188, Las Vegas, Nev. 89114; (702) 385-8879

Total assets managed	$1,082,000,000
Tax-exempt assets managed	$191,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	14
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	1

First Interstate Investment Advisers, a balanced manager, takes a defensive equity approach, using business cycle analysis for the cash-equity decision. Selection is based on a value/growth systematic process, with a large-cap emphasis.

Its fixed-income approach is interest rate anticipation with emphasis on capital preservation.

The tax-exempt asset mix Jan. 1 was 55% stocks and 45% bonds.

The firm had a net gain of $36 million in 1985 in new tax-exempt business; three clients were added. It follows 420 stocks closely.

Clients include Nevada State Industrial Insurance System, Nevada Power and University of Nevada Endowment.

First Interstate Investment Advisers is a wholly owned subsidiary of First Interstate Bancorp.

The chief investment officer is Robert M. Lee, president; client contact is Randy Campanale, director of marketing.

First Investment Management

P.O. Box 25189, Oklahoma City, Okla. 73125; (405) 272-4202

Total assets managed	$1,787,000,000
Tax-exempt assets managed	$1,290,000,000
Real estate assets managed	$190,000,000
401(k) and 457 assets managed	$20,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	150
Types of accounts managed	CEFG
No. of portfolio managers	9
Size of research staff	3

First Investment Management offers equity, fixed-income, balanced, options and convertibles capabilities.

The firm's equity valuation framework looks for value using three components: long-term value using dividend discount model and relative p/e; near-term value using expectational earnings; and technical confirmation.

Using interest rate anticipation, the firm builds core fixed-income portfolios of one- to 10-year laddered government securities.

The asset mix Jan. 1 was 40% stocks, 40.4% bonds, 8.3% cash, 0.5% equity real estate, 10% mortgage-backed securities and 0.8% GICs.

In 1985, the firm had a $32.4 million net gain in new tax-exempt business; eight clients were added.

Clients include Noble Foundation, Shriners Hospitals and Oklahoma G&E.

Eighty percent of research is generated in-house, with 120 stocks followed closely and 1,000, generally.

First Investment Management is a subsidiary of First National Bank and Trust Co. of Oklahoma City.

Chief investment officer is C. Lee Liscom, vice president. Client contact is Timothy A. Sloan, marketing manager.

The annual directory of real estate advisers will be published in the Sept. 15 issue.

First Investors Equity Management Co. Inc.

120 Wall St., New York, N.Y. 10006; (212) 208-6020

Total assets managed	$180,000,00
Tax-exempt assets managed	$2,000,00
International assets managed	$100,00
Minimum separate account	$5,000,00
Tax-exempt clients	
Types of accounts managed	
No. of portfolio managers	
Size of research staff	

First Investors Equity Management Co. Inc. is a contrarian equity and international manager.

As of Jan. 1, all of the firm's tax-exempt assets were in stocks.

The firm is a subsidiary of First Investors Consolidated Corp., which has assets of $3 billion, $7 million of which are tax exempt.

Patrick Page Kildoyle, president, is chief investment officer. James C. Vogelzang, president of Vogelzang & Associates, is client contact, at P.O. Box 890 Calistoga, Calif., 94515.

First Kentucky Co.

P.O. Box 36060, Louisville, Ky. 40233; (502) 581-7668

Total assets managed	$1,500,000,00
Tax-exempt assets managed	$1,300,000,00
Passive assets managed	$19,000,00
Minimum separate account	$5,000,00
Tax-exempt clients	4
Types of accounts managed	CEF
No. of portfolio managers	
Size of research staff	

First Kentucky Co. is an equity, fixed-income, balanced and international manager.

Its equity approach combines quantitative analysis with traditional equity research to identify undervalued securities among low p/e, high-yield and growth companies.

In fixed income, the firm targets intermediate maturities and durations, swapping for incremental return.

The Jan. 1 tax-exempt asset mix was 39% stocks, 48% bonds and 13% cash.

In 1985, the firm realized a $30 million net gain in new tax-exempt business. One client was added.

It watches 50 stocks closely and 100, generally; 30% of research is generated internally.

The firm is a wholly owned subsidiary of First Kentucky National Corp.

Irvin W. Quesenberry Jr., senior vice president, is chief investment officer. Barbara J. Brunner, senior marketing officer, is the client contact.

First Manhattan Capital Management

437 Madison Ave., New York, N.Y. 10022; (212) 832-4400

Total assets managed	$1,300,000,00
Tax-exempt assets managed	$1,300,000,00
Minimum separate account	$20,000,00
Tax-exempt clients	1
Types of accounts managed	CE
No. of portfolio managers	
Size of research staff	1

Equity manager First Manhattan Capital Management uses a bottom-up, risk-averse strategy. It buys companies with high ROEs and low leverage at prices below business values.

The Jan. 1 tax-exempt asset mix was 87% stocks and 13% cash.

In 1985, the firm realized a $200 million net gain in new tax-exempt business. Seven clients were added.

The staff follows 600 stocks closely and 1,000, generally; 80% of research is generated internally.

Clients include GTE, U S WEST, Consolidated Edison of New York and Booz, Allen & Hamilton.

The firm is a group within First Manhattan Co.

Chief investment officers are David S. Gottesman, managing partner, and Robert M. Howitt, president. Harold M. Newman, senior vice president, is client contact.

First Maryland Asset Management

25 S. Charles St., P.O. Box 1596, Baltimore, Md. 21203; (301) 244-4654

Total assets managed	$750,000,00
Tax-exempt assets managed:	
Total	$560,000,00

Commingled accounts	$50,000,000
Separate accounts	$510,000,000
Passive assets managed	$28,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	75
Separate	118
Types of accounts managed	CEFG
No. of portfolio managers	8
Size of research staff	5

First Maryland Asset Management is an equity, fixed-income and balanced manager. Its equity approach is based on growth and emerging growth stocks. The firm's fixed-income approach relies on interest rate anticipation.

The mix of tax-exempt assets Jan. 1 was 40% stocks, 50% bonds and 10% cash.

Clients included Maryland State Accident Fund, Waverly Press, Baltimore Equitable Society and Montgomery County Board of Education.

The bank follows 90 stocks closely.

M. Elliot Randolph Jr., senior vice president, is chief investment officer. Client contact is Michael A. Bateman, vice president.

First National Bank of Atlanta

2 Peachtree St. N.W., Atlanta, Ga. 30383; (404) 588-5000

Total assets managed	$2,067,000,000
Tax-exempt assets managed:	
Total	$1,402,000,000
Commingled accounts	$87,000,000
Separate accounts	$1,315,000,000
Real estate assets managed	$27,000,000
401(k) and 457 assets managed	$100,000,000
Passive assets managed	$80,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	200
Separate	269
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	4

First National Bank of Atlanta is an equity, fixed-income, balanced and timberland manager.

The firm's equity approach uses a limited number of issues. The object is to generate returns greater than the S&P 500 over three to five years with less volatility.

Its fixed-income approach uses interest rate anticipation.

Its timberland fund invests in tracts in the Southeast.

The mix of tax-exempt assets Jan. 1 was 52% stocks, 36% bonds, 9% cash, 2% equity real estate and 1% mortgages.

Twenty-five percent of research is generated internally, with 225 stocks followed closely and 250, generally.

Clients include Employees Retirement System of Georgia, Southern Co., Georgia Firemen and MARTA.

Chief investment officer is Dean J. Patenaude, senior vice president. Client contact is Richard H. Burgin, vice president-sales marketing.

The First National Bank of Cincinnati

First National Bank Center, Fifth & Walnut Streets, Cincinnati, Ohio 45201; (513) 632-4588

Total assets managed	$1,770,000,000
Tax-exempt assets managed:	
Total	$383,000,000
Commingled accounts	$81,000,000
Separate accounts	$302,000,000
Passive assets managed	$55,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	223
Separate	878
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	9

The First National Bank of Cincinnati is an equity, fixed-income and balanced manager. The bank monitors a fixed universe of stocks, using computer models to select the best combination of value and earnings estimate momentum. Industry diversification is augmented by the bank's macroeconomic forecast.

In fixed income, it uses market timing based on technical market trends.

The mix of tax-exempt assets Jan. 1 was 52% stocks, 37% bonds and 11% cash.

Clients include Cincinnati Gas & Klink, vice president and trust officer. Client contact is Thomas J. Lakin, vice president and trust officer.

First National Bank of Omaha

P.O. Box 3128, Omaha, Neb. 68103; (402) 341-0500

Total assets managed	$600,000,000
Tax-exempt assets managed:	
Total	$300,000,000
Commingled accounts	$41,000,000
Separate accounts	$259,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	2
Separate	24
Types of accounts managed	CEFGJ
No. of portfolio managers	7

First National Bank of Omaha is an equity, fixed-income and balanced manager.

The equity philosophy is to achieve consistent growth through capital appreciation and income. The bank is a value-oriented, bottom-up manager concentrating on security selection to achieve its goals.

For fixed income, it uses a laddered approach with a 10% emphasis on either end of the spectrum, depending on its economic outlook. Bonds have a minimum rating of A and a maximum maturity of 25 years.

The tax-exempt asset mix Jan. 1 was 46% stocks, 50% bonds and 4% cash.

Chief investment officer is Thomas W. Allen. Client contact is Milton E. Lackey Jr.

First Pacific Advisors Inc.

10301 W. Pico Blvd., Los Angeles, Calif. 90064; (213) 277-4900

Total assets managed	$1,840,000,000
Tax-exempt assets managed	$1,325,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	31
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	2

First Pacific Advisors Inc. is an equity and fixed-income manager.

The firm's approach is fundamental, risk averse and value oriented. It adheres to strict valuation criteria and buy and sell disciplines. Options are used.

The Jan. 1 tax-exempt asset mix was 61% stocks, 5% bonds and 34% cash.

In 1985, the firm realized a $36 million net gain in new tax-exempt business; one client was added.

The firm follows 100 stocks closely and 300, generally; 75% of research is generated internally.

Clients include Rockwell International, GTE, Xerox and McGraw-Hill.

The firm is a wholly owned subsidiary of Angeles Corp.

George H. Michaelis, president, is chief investment officer. Lawrence P. McNeil, senior vice president, is client contact.

First Pennsylvania Bank

15th & Chestnut Streets, Philadelphia, Pa. 19101; (215) 786-7946

Total assets managed	$7,100,000,000
Tax-exempt assets managed:	
Total	$2,500,000,000
Commingled accounts	$160,000,000
Separate accounts	$2,340,000,000
401(k) and 457 assets managed	$50,000,00
Passive assets managed	$10,000,00
Minimum separate account	$5,000,00
Tax-exempt clients:	
Commingled	
Separate	
Types of accounts managed	CEFG
No. of portfolio managers	
Size of research staff	

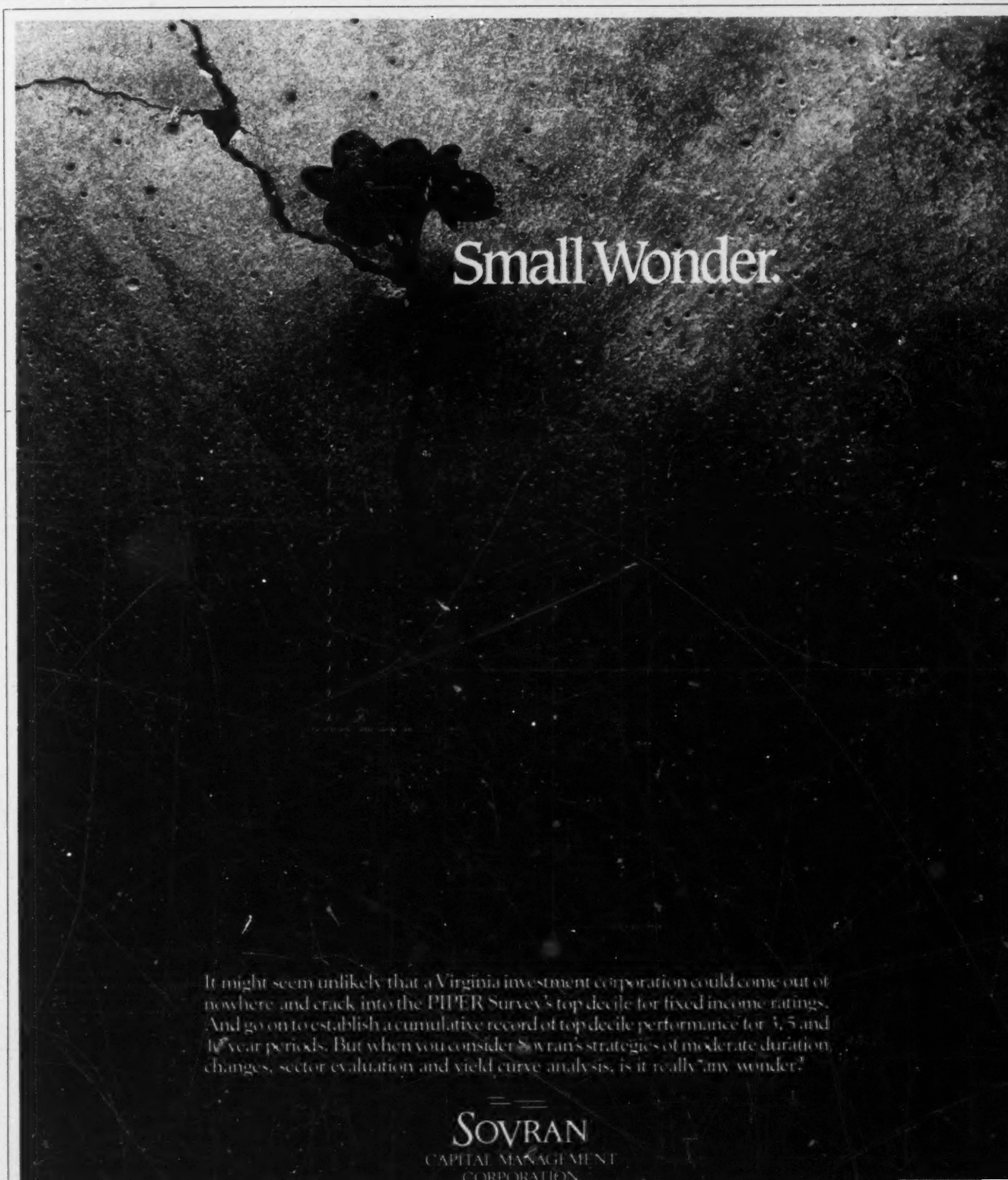
First Pennsylvania Bank is an equity fixed-income, balanced and stoc index fund manager.

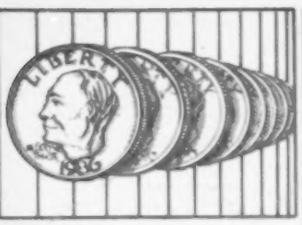
Its equity objective is to achieve total rate of return that consistent outperforms the major indexes wi less volatility. It anticipates chang has a strong sell discipline and seek earnings momentum.

In fixed income, it protects princip and maximizes return by shiftin assets within sectors by assumin either a bullish or bearish position in i assessment of key economic an monetary indicators.

The mix Jan. 1 of tax-exempt asse was 70% stocks, 28% bonds and 2 cash.

Fifty percent of research is ge erated internally, with 250 stocks fo





lowed closely and 500, generally.

Chief investment officer is Courtney O. Anderson, senior vice president. Client contact is James F. McHale, senior vice president.

First Quadrant Corp.

305 Madison Ave., CN 1932, Morristown, N.J. 07960; (201) 285-7119

Total assets managed	$4,585,000,000
Tax-exempt assets managed	$45,000,000
401(k) and 457 assets managed	$15,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	1

First Quadrant Corp. is an equity, fixed-income and balanced manager.

The firm takes a quantitative approach to equities, managing broadly diversified portfolios of liquid securities, with low p/e and relatively high yields. Fixed-income portfolios are of relatively long duration. Managers arbitrage among U.S. government and agency securities.

The asset mix Jan. 1 was 96% stocks and 4% cash.

Clients include Xerox and Crum & Forster.

Chief investment officer and client contact is Robert M. Lovell Jr., president.

First Security Investment Management

P.O. Box 30006, Salt Lake City, Utah 84130; (801) 350-5805

Total assets managed	$1,550,000,000
Tax-exempt assets managed	$800,000,000
401(k) and 457 assets managed	$300,000,000
Minimum separate account	$500,000
Types of accounts managed	CEPGJ
No. of portfolio managers	6
Size of research staff	1

First Security Investment Management offers equity, fixed-income and balanced capabilities.

In equities, managers emphasize companies with sales of $80 million to $800 million, strong ROE and a p/e to growth of less than 1.0x.

Using interest rate anticipation, the fixed-income approach emphasizes Treasuries and AA non-corporate bonds. Options are used.

The asset mix Jan. 1 was 60% stocks and 40% bonds.

The portfolio managers follow 200 stocks closely and 200, generally.

Clients include Idaho, University of Utah, ZCMI and Intermountain Health Care.

Raymond H. Diggle Jr. is chief investment officer and client contact.

First Tennessee Investment Management

Box 84, Memphis, Tenn. 38101; (901) 523-5651

Total assets managed	$1,931,000,000
Tax-exempt assets managed:	
Total	$974,000,000
Commingled accounts	$164,000,000
Separate accounts	$810,000,000
Real estate assets managed	$40,000,000
401(k) and 457 assets managed	$20,000,000
Tax-exempt clients:	
Commingled	204
Separate	512
Types of accounts managed	CEPGJ
No. of portfolio managers	7
Size of research staff	4

First Tennessee Investment Management offers equity, fixed-income and balanced capabilities.

In equities, managers are cycle investors, looking for stocks with long-term growth in unit volume, sales and earnings. Options are used.

In fixed income, managers also are cycle investors, taking advantage of the yield curve and other temporary distortions in the market. There is a strong emphasis on credit considerations.

The Jan. 1 tax-exempt asset mix was 48% stocks, 48% bonds, 2% cash and 2% mortgage-backed securities.

Clients include city of Memphis, Memphis Publishing and Memphis State University.

William V. Pruett, president, is chief investment officer. Client contact is David H. Daugherty, vice president.

First Trust Co. Inc.

First Trust Center, 180 E. Fifth St., St. Paul, Minn. 55101; (612) 223-7422

Total assets managed	$8,500,000,000
Tax-exempt assets managed:	
Total	$2,700,000,000
Commingled accounts	$900,000,000
Separate accounts	$1,800,000,000
401(k) and 457 assets managed	$250,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	1,435
Types of accounts managed	CEGJ
No. of portfolio managers	9

First Trust Co. Inc. offers equity, fixed-income and balanced accounts.

Managers take a value-oriented, sector rotational approach to equities. Options and stock index futures are used.

In fixed income, portfolio duration and interest rate anticipation are used.

The asset mix Jan. 1 was 41% stocks, 37% bonds, 21% cash and 1% other.

First Trust Co. Inc. is the result of a merger of First Trust Bank, St. Paul, and First Bank, Minneapolis.

James S. Rovner, senior vice president, is chief investment officer. Client contact is William D. Bensman, vice president.

First Union/Capital Management Group

1200 First Union Plaza, CMG-16, Charlotte, N.C. 28288; (704) 374-6117

Total assets managed	$2,391,000,000
Tax-exempt assets managed:	
Total	$1,738,000,000
Commingled accounts	$516,000,000
Separate accounts	$1,222,000,000
401(k) and 457 assets managed	$124,000,000
Minimum separate account	$2,000,000
Tax-exempt clients:	
Commingled	597
Separate	75
Types of accounts managed	CEPGJ
No. of portfolio managers	11
Size of research staff	5

First Union/Capital Management Group offers equity, fixed-income and balanced capabilities.

The equity approach emphasizes stock selection and moderate market timing. Managers are value-oriented, combining fundamental analysis with quantitative techniques to identify undervalued securities.

In fixed income, managers take two approaches — one emphasizes income and stability, and the other, total return. Both use interest rate anticipation and focus on high-quality issues.

Options and fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 47% stocks, 31% bonds and 22% cash.

Clients include Ashland Oil, Trailways, Chanel and Standard Products.

Eighty percent of the research is generated in-house, with 80 stocks followed closely and 1,000, generally.

Chief investment officer is William R. Hackney III, vice president. Debbie Tate Corson is client contact.

First Wisconsin National Bank of Madison

P.O. Box 7900, 1 S. Pinckney St., Madison, Wis. 53707; (608) 252-4152

Total assets managed	$1,378,000,000
Tax-exempt ass'ts managed:	
Total	$622,000,000
Commingled accounts	$308,000,000
Separate accounts	$314,000,000
Real estate assets managed	$6,000,000
401(k) and 457 assets managed	$15,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEPGJ
No. of portfolio managers	9

First Wisconsin National Bank of Madison offers equity, fixed-income, balanced and real estate accounts.

The equity approach focuses on companies with strong balance sheets, EPS growth equal to or greater than the S&P 500 and selling at a moderate p/e ratio.

For fixed income, managers invest in high-grade short- and intermediate-term bonds with a five-year maximum maturity for high income and safety of principal.

The Jan. 1 asset mix was 41.8% stocks, 34.1% bonds, 2.6% mortgages, 0.4% equity real estate and 21.1% commercial paper and CDs.

Sixty percent of research is generated internally, with 100 stocks followed closely and 200, generally.

Clients include American Family Insurance, Oscar Mayer, Briggs & Stratton and Methodist Foundation.

Scott Harkness, senior vice president, is chief investment officer. Client contact is Robert L. Webster, assistant vice president.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., P.O. Box 2054, Milwaukee, Wis. 53201; (414) 765-4444

Total assets managed	$3,700,000,000
Tax-exempt assets managed:	
Total	$1,945,000,000
Commingled accounts	$630,000,000
Separate accounts	$1,015,000,000
Real estate assets managed	$5,000,000
401(k) and 457 assets managed	$51,000,000
Passive assets managed	$495,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	510
Separate	93
Types of accounts managed	CEPGJ
No. of portfolio managers	18

First Wisconsin Trust Co. offers equity, fixed-income, balanced, real estate, equity/bond index, immunization/dedication, guaranteed investment contract pooled and technology accounts.

In equities, managers use valuation models (discounts future cash flows by investors' required return and dividend discount) to isolate opportunities. Profit and growth rates drive the models.

In fixed income, its active management uses interest rate anticipation. Portfolios are immunized and dedicated against specific liability streams.

In real estate, unleveraged equity positions are invested in existing, leased commercial properties to develop a stable income stream and potential appreciation.

The Jan. 1 asset mix was 16.82% stocks, 44.44% bonds, 33.65% cash, 0.32% equity real estate and 4.77% miscellaneous.

Clients include Briggs & Stratton, Johnson Controls and Dayton-Hudson.

Marvin R. Swentkofske, first vice president, is chief investment officer. Client contact is Charles Groeschell, senior investment officer.

Fiscal Consultants Inc.

1075 Bay St., Suite 905, Toronto, Ontario M5S 2B1; (416) 960-8225

Total assets managed	$395,000,000(U.S.)
Tax-exempt assets managed:	
Total	$200,000,000
For subsidiaries of U.S. firms	$20,000,000
International assets managed	$55,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	10
U.S. subsidiaries	1
Types of accounts managed	CE
Size of research staff	3

Fiscal Consultants Inc. is an equity, fixed-income and balanced manager.

In equities, it takes a value-oriented top-down business cycle approach emphasizing asset mix, industry selection, capital preservation and active use of cash reserves.

Its active bond approach is based on interest rate anticipation, with computer-sourced spread data used extensively to trade between markets and maturities.

The asset mix Jan. 1 was 31% Canadian stocks, 37.5% bonds, 25% cash and 6.5% U.S. stocks.

Sixty percent of the research is generated internally, with 100 stocks followed closely and 150, generally.

Larry T. Kennedy, president, is chief investment officer. Client contact is Huntly Christie, vice president.

Fischer, Francis, Trees & Watts Inc.

717 Fifth Ave., New York, N.Y. 10022; (212) 350-8050

Total assets managed	$8,800,000,000
Tax-exempt assets managed	$7,500,000,000
Real estate assets managed	$500,000,000
International assets managed	$400,000,000
Passive assets managed	$560,000,000
Minimum separate account	$40,000,000
Tax-exempt clients	35
Types of accounts managed	CEPG
No. of portfolio managers	12

Fixed-income manager Fischer, Francis, Trees & Watts Inc. believes maturity and issuer sector analysis are essentially as important in its approach as interest rate anticipation.

Options and fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 80% bonds and 20% mortgage-backed securities.

In 1985, the firm realized a $220 million net gain in new tax-exempt business; seven clients were added.

Clients include IBM, World Bank, Yale University and New York City Teachers.

Richard G. Fischer, president, is chief investment officer. John H. Watts, chairman, is the client contact.

Fisher Investments

301 Hennik Road, Woodside, Calif. 94062; (415) 851-3334

Total assets managed	$32,000,000
Tax-exempt assets managed	$18,000,000
Minimum separate account	$500,000
Tax-exempt clients	15
Types of accounts managed	CJ
No. of portfolio managers	2
Size of research staff	1

Fisher Investments is primarily an equity manager.

Its equity approach uses price-sales ratios to identify unpopular stocks, and analyzes these securities for financial strength and business fundamentals.

In fixed income, it uses staggered maturity portfolios of long-term government and corporate issues.

The asset mix Jan. 1 was 75% stocks, 10% bonds and 15% cash.

In 1985, the firm realized a $10 million net gain in new tax-exempt business; seven clients were added.

Kenneth L. Fisher, president, is chief investment officer. Joseph L. Toms, portfolio manager, is client contact.

Fiske Capital Management

8 Grove St., P.O.Box 96, Wellesley, Mass. 02181; (617) 237-0010

Total assets managed	$101,000,000
Tax-exempt assets managed	$98,000,000
401(k) and 457 assets managed	$3,000,000
Minimum separate account	$500,000
Tax-exempt clients	117
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	1

Fiske Capital Management is an equity manager emphasizing quantitative analysis and cyclical asset allocation between growth-equity issues and cash.

As of Jan. 1, all of the firm's assets were in stocks.

In 1985, the firm realized a $3 million net gain in new tax-exempt business; 18 clients were added.

All research is generated in-house; 1,340 stocks are followed closely

Edwin F. Thrall Jr., managing principal, is chief investment officer. Steven Vantine, director of portfolio operations, is the client contact.

FMI Capital Management Inc.

4610 University Ave., Madison, Wis 53705; (608) 231-1676

Total assets managed	$85,000,000
Tax-exempt assets managed	$32,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	49
Types of accounts managed	CEFJ
No. of portfolio managers	3
Size of research staff	3

FMI Capital Management Inc. is an equity and balanced manager, focusing on smaller growth companies that are not widely researched and tend to have low p/es. The fixed-income approach is passive.

The Jan. 1 tax-exempt asset mix was 75.9% stocks, 18.9% bonds and 5.2% cash.

In 1985, the firm realized a $300,000 net gain in new tax-exempt business; 27 clients were added.

Clients include Gehl Manufacturing, and Edgewood Clinic.

John W. Thompson, president, is chief investment officer and client contact.

Foreign and Colonial Asset Management

45 Wall St., New York, N.Y. 10005; (212) 806-4480

Total assets managed	$54,000,000
Tax-exempt assets managed:	
Total	$16,000,000
Commingled accounts	$16,000,000
International assets managed	$16,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	8
Types of accounts managed	C
No. of portfolio managers	10
Size of research staff	10

Foreign and Colonial Asset Management is an international equity, non-U.S., global and fixed-income manager.

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17 Battery Place New York, New York 10004 (212) 742-6557

In equities, managers take a bottom-up approach, emphasizing sustainable earnings growth, underutilized assets and strong management.

In fixed income, managers look for AA or better. The duration is modified according to outlook. Anomaly switching and new issue arbitrage are actively used.

The asset mix Jan. 1 was 97% stocks and 3% cash.

The firm is affiliated with Foreign & Colonial Management Group, London, and U.S. Trust Co. of New York.

Chief investment officer is Eric C. Elstob. Client contact is John K. Holland, vice president.

Forstmann-Leff Associates

Park Avenue Plaza, 55 E. 52nd St., New York, N.Y. 10055; (212) 644-9888

Total assets managed	$3,740,000,000
Tax-exempt assets managed	$3,700,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	71
Types of accounts managed	CEPGJ
No. of portfolio managers	7
Size of research staff	5

Forstmann-Leff Associates is an equity and balanced manager.

The firm has a risk-averse, capital-preservation and asset allocation-driven approach to equity management. Its aim is significant participation in up-market cycles and a defensive reallocation of capital assets to resist erosion in down-market cycles. Stock index futures are used.

When investing in bonds, its approach emphasizes interest rate anticipation with restructuring of maturity distribution being the dominant technique. Investments are made only in government and agency issues and in corporate bonds rated at least AA.

The asset mix Jan. 1 was 92% stocks, 0.5% bonds and 7.5% cash.

Half of the research is generated internally, with 200 stocks followed closely and 350, generally.

Clients include Lockheed, Amoco, Marriott and Hughes Aircraft.

J. Anthony Forstmann, Joel B. Leff and William F. Harnisch, managing directors, are chief investment officers. Client contact is Peter A. Lusk, vice president and director of marketing.

Foyston, Gordon & Payne

Suite 1201, 10 King St. E., Toronto, Ontario M5C 1C3; (416) 362-4725

Total assets managed	$175,000,000(U.S.)
Tax-exempt assets managed	
Total	$126,000,000
For subsidiaries of U.S. firms	$65,000,000
International assets managed	$12,000,000
Minimum separate account	$2,500,000
Tax-exempt clients	
Total	14
U.S. subsidiaries	4
Types of accounts managed	CF
No. of portfolio managers	4

Foyston, Gordon & Payne Inc., a Canadian firm, is primarily a balanced manager, but also manages some equity and fixed-income accounts.

Stock selection is bottom-up, using an in-house screening process that concentrates on company fundamentals. For fixed income, it concentrates on government securities augmented with some high-quality corporate issues. It uses interest rate anticipation.

The asset mix Jan. 1 was 42% Canadian stocks, 40% bonds, 10% cash and 8% U.S. stocks.

Peter G. Gordon, president, is chief investment officer and client contact.

Franklin Asset Management Systems

777 Mariners Island Blvd., San Mateo, Calif. 94404; (415) 570-3078

Total assets managed	$155,000,000
Tax-exempt assets managed	$40,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	E
No. of portfolio managers	2
Size of research staff	1

Equity manager Franklin Asset Management Systems emphasizes stocks with low p/e and strong earnings growth.

As of Jan. 1, the tax-exempt asset mix was 98% stocks and 2% cash.

In 1985, the firm realized a $40 million net gain in new tax-exempt business. Two clients were added.

It follows 500 stocks closely and 700, generally; all research is generated in-house.

The firm is a subsidiary of Franklin Resources Inc.

Marvin McClay, vice chairman, is chief investment officer. J. Paul Lewis, president, is the client contact.

Franklin Portfolio Associates

1 Post Office Square, Suite 3660, Boston, Mass. 02109; (617) 423-4448

Total assets managed	$1,443,000,000
Tax-exempt assets managed	$1,417,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	15
Types of accounts managed	CEPG
No. of portfolio managers	3

Equity manager Franklin Portfolio Associates Inc. takes a multiple valuation approach, constructing portfolios to reflect client benchmarks. Stock index futures are used.

The Jan. 1 tax-exempt asset mix was 97% stocks and 3% cash.

In 1985, the firm realized a $674 million net gain in new tax-exempt business. Six clients were added.

The firm follows 2,900 stocks closely and 2,900 generally; 90% of research is generated internally.

Clients include IBM, Alcoa, Amoco and Bell Atlantic.

The firm is a wholly owned subsidiary of Mellon National Corp.

John J. Nagorniak, president, is chief investment officer. Spencer L. Timm, senior vice president, is the client contact.

Fraser Management Associates Inc.

309 S. Willard St., P.O. Box 494, Burlington, Vt. 05402; (802) 658-0322

Total assets managed	$86,000,000
Tax-exempt assets managed	$20,000,000
Minimum separate account	$100,000
Tax-exempt clients	27
Types of accounts managed	CEF
No. of portfolio managers	4

Equity manager Fraser Management Associates Inc. selects individual stocks along contrarian lines. The fixed-income approach is passive.

The tax-exempt asset mix Jan. 1 was 95% stocks and 5% bonds.

In 1985, the firm realized a $4 million net gain in new tax-exempt business; 24 clients were added.

Fifty stocks are watched closely and 140, generally; 25% of research is generated internally.

James L. Fraser, president, is chief investment officer. David D. Steece, vice president, is client contact.

Friess Associates Inc.

P.O. Box 4166, Greenville, Del. 19807; (302) 656-3017

Total assets managed	$241,000,000
Tax-exempt assets managed	$151,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	70
Types of accounts managed	CEPG
No. of portfolio managers	4

Friess Associates Inc. is an equity manager using growth stocks, emerging growth and low p/e.

The tax-exempt asset mix Jan. 1 was 93% stocks and 7% cash.

Clients include The Nobel Foundation, New Castle County, John Fluke Manufacturing and Wolverine Worldwide.

The firm follows 60 stocks closely and 300, generally; 95% of research is done internally.

Foster S. Friess is chief investment officer. William F. D'Alonzo is client contact.

Froley, Revy Investment Co.

10900 Wilshire Blvd., Suite 1050, Los Angeles, Calif. 90024; (213) 208-4938

Total assets managed	$371,000,000
Tax-exempt assets managed	$306,000,000
International assets managed	$2,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	24
Types of accounts managed	CFG
No. of portfolio managers	2
Size of research staff	2

Froley, Revy Investment Co. deals in convertible securities, focusing on

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emerging growth stocks and interest rate anticipation.

As of Jan. 1, the firm's tax-exempt asset mix was 6.8% stocks, 4.7% cash and 88.5% convertible securities.

In 1985, the firm realized a $20 million net gain in new tax-exempt business. Four clients were added.

One-fourth of the research is generated internally; 300 stocks are followed closely and 600, generally.

Clients include state of Delaware, Gannett, U.S. Olympic Fund and Presbyterian Church.

Thomas Revy and George A. Froley III, managing directors, are chief investment officers. T. Michael Graf and Melinda J. Gordon are client contacts.

Frontier Capital Management

286 Congress St., Boston, Mass. 02210; (617) 426-8880

Total assets managed	$742,000,000
Tax-exempt assets managed	$716,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	26
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	4

Equity manager Frontier Capital Management Co. bases its approach on relative earnings growth. The firm looks for companies that for cyclical, structural or secular reasons will grow two to three times as fast as the overall market. It has a passive fixed-income approach.

The mix of tax-exempt assets Jan. 1 was 91% stocks and 9% cash.

Last year, the firm had a net loss of $171 million in tax-exempt assets; two clients were added.

Half of the research is generated internally, with 100 stocks followed closely and 200, generally.

Clients include Brown & Shar-, Donaldson, Lufkin & Jenrette; Brigham and Women's Hospital; Pennsylvania Power & Light.

The chief investment officer is J. David Wimberly, president. The client contact is John A. McQuilkin, senior vice president.

Furgueson Capital Management Inc.

19 W. 44th St., New York, N.Y. 10036; (212) 840-1781

Total assets managed	$84,000,000
Tax-exempt assets managed	$11,000,000
Minimum separate account	$100,000
Tax-exempt clients	14
Types of accounts managed	CE
No. of portfolio managers	3

Furgueson Capital Management Inc. is primarily an equity manager.

In equities, the firm is a fundamental investor, stressing longer-term results and concentrating on balance sheet analysis, strength of management and industry position.

Its fixed-income approach is passive; maturities are laddered to reduce interest rate risk.

The asset mix Jan. 1 was 70% stocks, 12% bonds and 18% cash.

Cornelius Furgueson IV is chief investment officer. He and Stephen Orr are client contacts.

Furman Selz Capital Management

230 Park Ave., New York, N.Y. 10169; (212) 309-8422

Total assets managed	$305,000,000
Tax-exempt assets managed	$215,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	15
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	14

Furman Selz Capital Management is an equity and balanced manager.

It focuses on value-oriented stock selection with a bias toward issues priced at modest p/e ratios. In fixed income, interest rate anticipation is emphasized, as is protection of portfolios and consistent asset growth through market cycles.

The asset mix Jan. 1 was 70% stocks, 19% bonds and 11% cash.

The firm had a net gain in new tax-exempt business in 1985 of $140 million.

Half of the research is generated internally, with 200 stocks followed closely and 750, generally.

The firm is a wholly owned subsidiary of Furman Selz Holding Corp.

William W. Storff, managing director, is the client contact.

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GAMCO Investors Inc.

655 Third Ave., New York, N.Y. 10017; (212) 972-2350

Total assets managed	$898,000,000
Tax-exempt assets managed	$630,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	64
Types of accounts managed	CEFJ
No. of portfolio managers	5
Size of research staff	5

GAMCO Investors Inc. is an equity manager that uses Graham & Dodd principles and the private market value approach. The firm buys domestic companies, preferably with a franchise, at 60 cents on the dollar. The firm then identifies a catalyst that will surface underlying value.

The asset mix Jan. 1 was 85% stocks and 15% cash.

The firm had a net gain in new tax-exempt business in 1985 of $160 million.

All of the research is generated internally, with 75 stocks followed closely and 250, generally.

Clients include Honeywell, Conoco, Fruehauf and Masters, Mates & Pilots.

GAMCO is a wholly owned subsidiary of The Gabelli Group Inc.

Mario J. Gabelli, chairman, is chief investment officer. Douglas R. Jamieson, vice president, is the client contact.

Ganz Associates Inc.

520 N.W. 165 Street Rd., Miami, Fla. 33169; (305) 949-2800

Total assets managed	$85,000,000
Tax-exempt assets managed	$20,000,000
Minimum separate account	$500,000
Tax-exempt clients	25
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	1

Ganz Associates Inc. is primarily an equity manager that stresses growth stocks and market timing in its approach.

Interest rate anticipation is emphasized in its fixed-income approach.

The asset mix Jan. 1 was 82% stocks, 15% bonds and 3% cash.

One-fourth of the research is generated internally, with 50 stocks followed closely and 200, generally.

Arnold M. Ganz, chairman, is chief investment officer. Client contact is Charles B. Ganz, president.

Gardner and Preston Moss

1 Winthrop Square, Boston, Mass. 02110; (617) 482-6500

Total assets managed	$3,338,000,000
Tax-exempt assets managed	$2,885,000,000
Passive assets managed	$22,000,000
Minimum separate account	$400,000
Tax-exempt clients	384
Types of accounts managed	CEFGJ
No. of portfolio managers	23

Gardner and Preston Moss Inc. is an equity, fixed-income and balanced manager.

The equity approach is based on economic, technical and valuation factors and uses industry-specific key variables and relative valuation measures to vary sector weightings.

The fixed-income approach emphasizes protecting principal and providing consistent returns. The firm varies maturity based on interest rate outlook and yield curve valuation; and the firm changes sector and quality based on relative value. Options and fixed-income futures are used.

The mix of tax-exempt assets Jan. 1 was 42% stocks, 38% bonds, 16% cash and 4% foreign.

Britannia Arrow Holdings PLC is the parent company.

Clients include Washington Metropolitan Transit Authority, Boston Globe Blue Cross/Blue Shield of Wisconsin and Museum of Fine Arts-Boston.

Chief investment officer is G. Kinnear Pash, executive vice president. Client contact is Sue Ellen Whelan, marketing administrator.

Garrison, Keogh & Co. Inc.

250 Park Ave., New York, N.Y. 10177; (212) 557-7440

Total assets managed	$237,000,000
Tax-exempt assets managed	$168,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	22
Types of accounts managed	CEFJ
No. of portfolio managers	3

Garrison, Keogh & Co. Inc. is an equity and balanced manager.

Undervalued growth is stressed in its equity approach, focusing on companies with high returns, good earnings growth, strong market positions, solid finances and low institutional ownership. Proprietary valuation techniques are used.

Bonds are purchased only when risk/reward is favorable.

The asset mix Jan. 1 was 57% stocks, 20% bonds and 23% cash.

In 1985, the firm had a net gain in new tax-exempt business of $10.3 million; two clients were added.

A committee of principals acts as chief investment officer. Client contact is William Bradford III, vice president.

Gateway Investment Advisers Inc.

1120 Carew Tower, Cincinnati, Ohio 45202; (513) 621-7774

Total assets managed	$203,000,000
Tax-exempt assets managed	$64,000,000
Passive assets managed	$35,000,000
Minimum separate account	$500,000
Tax-exempt clients	33
Types of accounts managed	CEF
No. of portfolio managers	3

Gateway Investment Advisers Inc. is an option specialist whose conservative strategies often involve index funds. Its fixed-income approach is interest rate anticipation.

The asset mix Jan. 1 was 94% stocks, 5% bonds and 1% cash.

In 1985, the firm had a $4 million net gain in new tax-exempt business; two clients were added. Clients include Armstrong Rubber and Toys 'R' Us.

Ten percent of research is generated internally, with 100 stocks followed closely and 500, generally.

Walter Sall, president, is chief investment officer; Peter Thayer, executive vice president, is client contact.

Geewax, Terker & Co.

583 Shoemaker Road, King of Prussia, Pa. 19406; (215) 337-2060

Total assets managed	$850,000,000
Tax-exempt assets managed	$850,000,000
Tax-exempt clients	22
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	1

Geewax, Terker & Co. is an equity manager using sector rotation. It applies a relative valuation approach that targets securities needing the least amount of positive surprise to outperform the market.

The tax-exempt asset mix Jan. 1 was 99% stocks and 1% cash.

The firm had a net gain of $550 million in new tax-exempt business in 1985; 10 clients were added.

Clients include GTE Investment, Scott Paper, University of Southern California and Xerox.

All research is generated internally, with 300 stocks followed closely and 750, generally.

John J. Geewax, partner, is chief investment officer and client contact.

General American Investors

330 Madison Ave., New York, N.Y. 10017; (212) 916-8408

Total assets managed	$1,714,000,000
Tax-exempt assets managed	$1,417,000,000
International assets managed	$85,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	20
Types of accounts managed	CEFG
No. of portfolio managers	3
Size of research staff	6

General American Investors Co. Inc. is a growth stock manager that uses a strict bottom-up approach.

The tax-exempt asset mix Jan. 1 was 92.5% stocks and 7.5% cash.

A $211 million net gain in new tax-exempt business was recorded in 1985; two clients were added.

Clients include Amax, General Signal, New York State Teachers and Yale University.

Ninety-five percent of research is generated internally, with 100 stocks followed closely and 300, generally.

The chief investment officer is Malcolm B. Smith, president. James B. Book IV, director of marketing, is the client contact.

General American Life Insurance Co.

700 Market St., St. Louis, Mo. 63101; (314) 231-1700

Total assets managed	$3,216,000,000
Tax-exempt assets managed:	
Total	$1,222,000,000
Pooled accounts	$72,000,000
Separate accounts	$124,000,000
Real estate assets managed	$23,000,000
401(k) and 457 assets managed	$30,000,000
GICs	$431,000,000
Annuities	$7,000,000
Other	$590,000,000
Indexed/dedicated assets	$58,000,000
Minimum separate account	$10,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	2

General American Life Insurance Co. offers equity, fixed-income, balanced and real estate capabilities.

In equities it is passive, offering two pooled index funds — an S&P 500 fund and a small-cap fund designed to reflect performance of the smallest 20% of the NYSE-listed stocks.

In fixed income, the approach also is passive and uses interest rate anticipation. One pooled fund is actively managed, containing publicly traded bonds. The other is a passively managed private placement bond fund.

In real estate, investments are made in growth areas of the country. The firm also has pooled commercial mortgage funds to participate in debt side.

The asset mix Jan. 1 was 15% stocks, 16% bonds, 12% cash and 57% mortgages.

About $28 million is in bond index and $30 million in equity index funds.

The company is affiliated with General American Investment Management Co.

Chief investment officer is Leonard M. Rubenstein, vice president and treasurer. Client contact is Ronald O. Drury, vice president-marketing and investment sales.

Kenneth J. Gerbino & Co.

9595 Wilshire Blvd., Suite 200, Beverly Hills, Calif. 90212; (213) 550-6304

Total assets managed	$22,000,000
Tax-exempt assets managed	$9,000,000
Minimum separate account	$100,000
Tax-exempt clients	30
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Kenneth J. Gerbino & Co. is an equity manager using growth stock, emerging growth, low p/e, Graham & Dodd and market timing in its approach.

The tax-exempt asset mix Jan. 1 was 75% stock and 25% cash.

The firm had a net loss of $1.7 million in tax-exempt business in 1985; six clients were added.

The firm follows 50 stocks closely and 50, generally.

The chief investment officer is Kenneth J. Gerbino; client contact is Catherine Bible, vice president.

GIMI

303 Wyman St., Waltham, Mass. 02154; (617) 890-4412

Total assets managed	$30,000,000
Tax-exempt assets managed	$30,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	2

Equity manager GIMI emphasizes small, innovative and well-managed companies operating in fundamentally attractive fields, with an opportunistic approach to out-of-favor and underresearched stocks.

The mix of tax-exempt assets as of Jan. 1 was 90% stocks and 10% cash.

The firm had a net gain of $20 million in new tax-exempt business in 1985; one client was added.

Clients include Frank Russell Trust and Vanguard.

Chief investment officer is John J. Granahan, president; client contact is Jane M. White, vice president.

Gintel Equity Management

Greenwich Office Park, No. 6, Greenwich, Conn. 06830; (203) 622-6400

Total assets managed	$189,000,000
Tax-exempt assets managed	$77,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	50
Types of accounts managed	CEFGJ
No. of portfolio managers	3
Size of research staff	1

Gintel Equity Management Inc. is an equity manager using emerging growth, low p/e, and Graham & Dodd in its approach.

The tax-exempt asset mix as of Jan. 1 was 86% stocks, 4% bonds and 10% cash.

Ninety percent of research is generated internally and 40 stocks are followed closely.

Clients include Operating Engineers, Savannah Longshoremen, University of Delaware and Strick Corp.

Robert M. Gintel, chairman and chief executive officer, is the chief investment officer; Alexander L. Robinson Jr., vice president, is client contact.

Glendeven Management and Research

417 S. Hill St., Suite 645, Los Angeles, Calif. 90013; (213) 617-7960

Total assets managed	$178,000,000
Tax-exempt assets managed	$118,000,000
401(k) and 457 assets managed	$22,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	22
Types of accounts managed	CEFJ
No. of portfolio managers	4

Glendeven Management and Research is an equity and balanced manager using low p/e and sector rotation in its equity approach. The fixed-income approach uses interest rate anticipation.

The mix of the tax-exempt assets Jan. 1 was 86% stocks and 14% cash.

The firm had a net gain of $8 million in new tax-exempt business in 1985; four clients were added.

Clients include Press Enterprises and Rutt Steel Corp.

Chief investment officers are Peter L. Harvie, Kevin B. Hayes, Gary B. Helms and Michael T. Papworth. Client contact is Gary B. Helms.

The Glenmede Trust Co.

229 S. 18th St., Philadelphia, Pa. 19103; (215) 875-3290

Total assets managed	$2,900,000,000
Tax-exempt assets managed:	
Total	$2,600,000,000
Separate accounts	$2,600,000,000
Real estate assets managed	$450,000,000
International assets managed	$50,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	40
Types of accounts managed	CEFG
No. of portfolio managers	5
Size of research staff	1

The Glenmede Trust Co. is an equity, fixed-income and balanced manager.

The equity approach uses computer screens to assist selection of growth securities selling at a reasonable price.

The fixed-income approach emphasizes observation of historical relationships to determine sectors with the best value.

The Jan. 1 tax-exempt asset mix was 55% stocks, 40% bonds and 5% cash.

In 1985, the bank realized a $295 million net gain in new tax-exempt business. Five clients were added.

Managers follow 185 stocks closely

and 1,000, generally; 5% of research is generated internally.

Clients include Pew Memorial Trust, The Medical Trust and Pennsylvania Public School Employees.

John W. Church Jr., vice president, is chief investment officer. Paul Irwin, vice president, is client contact.

Glickenhaus & Co.

6 E. 43rd St., New York, N.Y. 10017-4641; (212) 953-7800

Total assets managed	$1,600,000,000
Tax-exempt assets managed	$1,200,000,000
Minimum separate account	$4,000,000
Tax-exempt clients	70
Types of accounts managed	CEFGJ
No. of portfolio managers	11
Size of research staff	3

Glickenhaus & Co. is an equity, fixed-income and balanced manager. Its equity approach is low p/e and value-oriented, bottom-up stock selection.

Interest rate anticipation is used for fixed income. It analyzes credit and maturity in relation to economic conditions, purchasing high-quality issues.

The mix of tax-exempt assets Jan. 1 was 85% stocks and 15% bonds.

A $303 million net gain in tax-exempt business was recorded in 1985; eight clients were added.

Clients include Philip Morris, New York State Teachers, Xerox and New York Hospital.

Eighty percent of research is generated internally, with 100 stocks followed closely and 300, generally.

Glickenhaus is affiliated with Liss Tenner & Goldberg, a municipal bond firm.

Seth M. Glickenhaus Sr. is senior partner and chief investment officer. Client contact is Connie J. Moak, partner, client relations and operations.

Gofen and Glossberg Inc.

401 N. Michigan Ave., Chicago, Ill. 60611; (312) 828-1100

Total assets managed	$2,800,000,000
Tax-exempt assets managed	$325,000,000
Minimum separate account	$500,000
Tax-exempt clients	160
Types of accounts managed	CEFG
No. of portfolio managers	7
Size of research staff	4

Gofen and Glossberg Inc. is a balanced manager. In its equity approach, the firm stresses total return concept with valuation techniques emphasizing the relationship of p/e ratio to anticipated growth rates.

The fixed-income approach is interest rate anticipation, seeking a maximum rate of return consistent with minimal volatility of principal values.

The tax-exempt asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

Thirty percent of research is generated internally, with 100 stocks followed closely and 500, generally.

Chief executive officer is Carl X. Elvove, president; client contact is Mark R. Goodman.

Gradison & Co. Inc.

580 Building, Plaza Level, Cincinnati, Ohio 45244; (513) 579-5864

Total assets managed	$125,000,000
Tax-exempt assets managed	$60,000,000
Minimum separate account	$500,000
Tax-exempt clients	45
Types of accounts managed	CFG
No. of portfolio managers	3

Gradison & Co. Inc. is an equity manager using an earnings-driven, disciplined approach that is growth and value-oriented. Its fixed-income approach is passive.

The asset mix Jan. 1 was 70% stocks, 25% bonds and 5% cash.

A net gain in new tax-exempt business of $10 million was recorded in 1985; 10 clients were added.

It follows 100 stocks closely and 500, generally.

Chief investment officer is William J. Leugers, senior vice president; client contact is Alfred M. Brunner, vice president.

Grantham, Mayo, Van Otterloo & Co.

125 High St., Boston, Mass. 02110; (617) 574-4817

Total assets managed	$1,205,000,000
Tax-exempt assets managed	$1,205,000,000
International assets managed	$896,000,000
Passive assets managed	$317,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	28
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	3

Grantham, Mayo, Van Otterloo & Co. is an equity and international manager. It takes a rigorous value approach, stressing low p/e, low price to book ratios, high yield and best present value.

The mix of tax-exempt assets Jan. 1 was 88.3% stocks, 3.3% bonds and 8.4% cash.

The firm had a net gain of $123.5 million in new tax-exempt business in 1985; two clients were added.

Clients include World Bank, GE, Scott Paper and GTE.

Half of the research is generated internally with 1,200 stocks followed closely and 3,000, generally.

The client contact is Eyk Van Otterloo, partner.

E.M. Graves Investment Management

1720 Post Road, Westport, Conn. 06880; (203) 255-5701

Total assets managed	$81,000,000
Tax-exempt assets managed	$52,000,000
Real estate assets managed	$52,000,000
401(k) and 457 assets managed	$28,000,000
Passive assets managed	$17,000,000
Minimum separate account	$2,500,000
Tax-exempt clients	9
Types of accounts managed	CJ
No. of portfolio managers	3
Size of research staff	1

E.M. Graves Investment Management is a fixed-income manager, allocating assets between discount U.S. government mortgage-backed securities and variable-rate government securities depending on the interest rate forecast. Options and fixed-income futures are used.

All tax-exempt assets as of Jan. 1 were in mortgage-backed securities.

In 1985, it had a net gain of $29.4 million in new tax-exempt business.

Chief investment officer is Eben M. Graves Jr., president; client contact is William H. Hatch, vice president.

R.W. Graybill Ltd.

206 N. York, Elmhurst, Ill. 60126; (312) 941-9460

Total assets managed	$40,000,000
Tax-exempt assets managed	$26,000,000
Minimum separate account	$250,000
Tax-exempt clients	50
Types of accounts managed	CF
No. of portfolio managers	2

R.W. Graybill Ltd. is a balanced manager using low p/e in its equity approach and a passive approach to fixed income.

The mix of tax-exempt assets Jan. 1 was 50% stocks, 35% bonds and 15% cash.

The firm had a net gain of $2 million in new tax-exempt business in 1985; two clients were added.

Twenty-five percent of research is generated internally; 90 stocks are followed closely.

Chief investment officer is Robert W. Graybill; client contact is George R. Strell.

Great American Reserve Insurance Co.

2020 Live Oak, Dallas, Texas 75221; (214) 953-7442

Total assets managed	$746,000,000
Tax-exempt assets managed:	
Total	$127,000,000
Pooled accounts	$140,000,000
Real estate assets managed	$70,000,000
Types of accounts managed	CF
No. of portfolio managers	2

Great American Reserve Insurance Co. offers equity, fixed-income and balanced capabilities.

Stock selection is based on fundamental analysis with a preference for low p/e situations in out-of-favor companies with good earnings trends.

Basing its fixed-income approach on sector analysis, bond selection is based on buying wide spreads in improving credits and selling these bonds when their spread contracts relative to alternatives.

The tax-exempt asset mix Jan. 1 was 8% stocks, 34% bonds, 3% cash and 55% mortgage-backed securities.

Mark Luchsinger, assistant vice president, is chief investment officer and client contact.

The Great-West Life Assurance Co.

100 Osborne St. N., Winnipeg, Manitoba R3C 3A5; (204) 946-1190

Total assets managed	$7,668,000,000(U.S.)
Tax-exempt assets managed	$910,000,000
Real estate assets managed	$492,000,000
International assets managed	$40,000,000
Minimum separate account	$3,500,000
Tax-exempt clients	193
Types of accounts managed	CPU
No. of portfolio managers	15
Size of research staff	60

The Great-West Life Assurance Co., a Canadian firm, offers equity, fixed-income, balanced and real estate capabilities.

Its equity approach is passive/active. The indexed core provides diversification and efficiently implements the important timing decision. An aggressively managed U.S. fund complements the indexed core by investing in the half of the S&P 500 index not available in Canada.

The fixed-income approach is based on interest rate anticipation, with the majority of exposure in a pooled commercial and industrial mortgage fund. Capital appreciation is captured with an actively traded bond fund that has the ability to vary term quickly.

The actively managed real estate portfolio contains commercial, office and industrial properties. Value is added through rehabilitation and market timing.

The asset mix Jan. 1 was 30% Canadian stocks, 20% bonds, 5% cash, 10% equity real estate, 25% mortgages and 10% U.S. stocks.

Great-West is a subsidiary of Power Financial Corp., which also controls Investor Group and Montreal Trust. Its U.S. affiliate is in Englewood, Colo., and manages money for such clients as South Carolina, American Dental Association and the Chicago Board of Education.

Marshall G. Smith, executive vice president-investments, is chief investment officer. Client contact is John P. Embry, vice president-pension investments.

David J. Greene & Co.

30 Wall St., New York, N.Y. 10005; (212) 344-5180

Total assets managed	$1,330,000,000
Tax-exempt assets managed	$1,082,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	133
Types of accounts managed	CEF
No. of portfolio managers	8
Size of research staff	10

David J. Greene & Co. is an equity manager that invests in undervalued securities whose stock price does not reflect past or potential earning power, working capital, book value, dividend record and historical trading range.

The mix of tax-exempt assets Jan. 1 was 70% stocks and 30% cash.

The firm had a net gain of $44 million in new tax-exempt business in 1985; 14 clients were added.

Clients include U S WEST, Beatrice, Time and Federal Mogul.

Ninety-seven percent of research is generated internally with 60 to 70 stocks followed closely and 300, generally.

Chief investment officer is Alan I. Greene, managing director; client contact is Allan D. Sutton.

Greenspan O'Neil Associates

150 E. 52nd St., New York, N.Y. 10022; (212) 319-2520

Total assets managed	$85,000,000
Tax-exempt assets managed	$84,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	5
Size of research staff	1

Greenspan O'Neil Associates is an equity, fixed-income and balanced manager.

Its equity approach combines sector rotation and Graham & Dodd techniques. In fixed-income, the firm combines interest rate anticipation and sector analysis. Options are used.

The Jan. 1 asset mix was 91% stocks, 2% bonds and 7% cash.

The firm had a net gain in 1985 of $7 million; two clients were added. Clients include Wickes and Scan Optics.

C. Roderick O'Neil, chairman, is chief investment officer. Frederick E. Thalmann Jr., managing director, is the client contact.

Greenwich Monitrend Corp.

222 Bridge Plaza South, Fort Lee, N.J. 07024; (201) 886-2300

Total assets managed	$60,000,000
Tax-exempt assets managed	$60,000,000
Minimum separate account	$100,000
Tax-exempt clients	600
Types of accounts	CFJ
No. of portfolio managers	2
Size of research staff	3

Greenwich Monitrend Corp. is an equity manager whose approach uses equity mutual funds and money market funds based on signals on the overall market generated by its stock market model.

In fixed income, the bond-timing model is a statistically based, trend-following method of producing buy and sell signals.

The asset mix Jan. 1 was 2% bonds and 98% cash.

Otto Liebling, president, is chief investment officer. Client contact is Eliot Black, executive vice president.

The Griffin Group

200 W. Madison St., Suite 2710, Chicago, Ill. 60606; (312) 407-6300

Total assets managed	$2,652,000,000
Tax-exempt assets managed	$2,652,000,000
Real estate assets managed	$75,000,000
Passive assets managed	$135,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	73
Types of accounts managed	CEF
No. of portfolio managers	7

The Griffin Group is a balanced manager that seeks to perceive the influence of internal or external change on the growth prospects for a company or industry soon enough to capitalize on the future adjustments to market valuations.

The fixed-income approach consists

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STANDARD & POOR'S FINANCIAL SYSTEMS AND TRADING SERVICES

of interest rate anticipation, sector analysis and a controlled risk approach that quantifies investment objectives into a benchmark portfolio.

The mix of tax-exempt assets Jan. 1 was 34% stocks, 52% bonds, 11% cash and 3% mortgage-backed securities.

The firm had a net loss of $1 million in tax-exempt business in 1985; three clients were added.

Clients include AT&T, Northern Trust, Procter & Gamble and Illinois Tool Works.

The firm follows 150 stocks closely and 200, generally; 50% of research is generated internally.

The Griffin Group is a wholly owned subsidiary of Northern Trust Corp., Chicago.

The chief investment officer is David R. Geis; client contact is John T. Blunt, president.

Growth Stock Outlook Inc.

Suite 305, 4405 East-West Highway, Bethesda, Md. 20814; (301) 654-5205

Total assets managed	$244,000,000
Tax-exempt assets managed	$117,000,000
Minimum separate account	$150,000
Tax-exempt clients	155
Types of accounts managed	CEFJ
No. of portfolio managers	1
Size of research staff	4

Equity manager Growth Stock Outlook Inc. combines growth stock, emerging growth, low p/e and Graham & Dodd methods.

The Jan. 1 mix for tax-exempt assets was 60% stocks and 40% cash.

In 1985, the firm realized a $24 million net gain in new tax-exempt business.

Managers follow 400 stocks closely and 400, generally; 95% of research is generated internally.

Charles Allmon, president, is chief investment officer and client contact.

G.T. Capital Management

601 Montgomery St., Suite 1400, San Francisco, Calif. 94111; (415) 392-6181

Total assets managed	$1,170,000,000
Tax-exempt assets managed	$806,000,000
International assets managed	$758,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	16
Types of accounts managed	CEF
No. of portfolio managers	48

G.T. Capital Management Inc. is an equity and international manager.

The firm's philosophy of global growth investing combines a top-down approach to geographic asset allocation with a bottom-up approach to security selection.

The Jan. 1 tax-exempt asset mix was 95% stocks and 5% cash.

In 1985, the firm had a $9 million net loss in tax-exempt business.

Clients include IBM, GM, Arco and AT&T.

Managers follow 360 stocks closely and 690, generally; 30% of research is generated internally.

Michael F. O'Neill, president, and Benson H. Fung, executive vice president-international, are chief investment officers. Mary Lou Bernhoft, vice president-marketing and client services, is client contact.

Guaranty Trust Co. of Canada

366 Bay St., Toronto, Ontario M4H 2W5 (416) 975-4966

Total assets managed	$924,000,000(U.S.)
Tax-exempt assets managed:	
Total	$924,000,000
Real estate assets managed	$58,000,000
International assets managed	$90,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	261
Types of accounts managed	CEFPU
No. of portfolio managers	5

Guaranty Trust Co. of Canada is an equity, fixed-income, balanced, real estate and money market manager.

Its equity approach is low p/e, emphasizing sound security selection and diversification within industries and companies.

In fixed income, sector analysis is used, with emphasis on medium-term maturity schedules, extendible and retractable options and high-coupon income bonds.

As of Jan. 1, the asset mix was 35% Canadian stocks, 40% bonds, 8% cash, 6% mortgages, 1% equity real estate and 10% U.S. stocks.

Clients include Joseph E. Seagram, Champion Spark Plug of Canada, H.J. Heinz and Canadian Gypsum.

Peter DeAuer, vice president-investments, is chief investment officer. D.E. Wannamaker, vice president-pension services, is client contact.

Guardian Ruggles Crysdale

48 Yonge St., Suite 500, Toronto, Ontario M5E 1H3; (416) 364-8341

Total assets managed	$1,216,000,000(U.S.)
Tax-exempt assets managed:	
Total	$1,033,000,000
For subsidiaries of U.S. firms	$189,000,000
International assets managed	$23,000,000
Minimum separate account	$7,000,000
Tax-exempt clients:	
Total	58
U.S. subsidiaries	7
Types of accounts managed	CU
No. of portfolio managers	9

Guardian Ruggles Crysdale Inc., a Canadian firm, has equity, fixed-income, balanced and options capabilities.

The firm is risk averse in equities, with a high-quality, growth-stock orientation. Portfolios are concentrated in 25 to 30 stocks, and the use of specialty pooled funds is encouraged for broader diversification and focus.

In fixed income, it moves the duration of the portfolios along the yield curve depending on its interest rate outlook, taking into account economic, monetary and technical factors.

The asset mix Jan. 1 was 45% Canadian stocks, 35% bonds, 10% cash and 10% U.S. stocks.

Clients include Ford Motor Co. of Canada, Imasco and Gulf Canada.

The firm is a subsidiary of Guardian Capital Group Ltd., with $1.4 billion in assets under management. It also is affiliated through its chief executive officer with Ruggles & Crysdale Associates Inc., Boston.

Robert T. Ruggles, chief executive officer, is chief investment officer. Hugh L. Innes, vice president, is the client contact.

Guardian Timing Services

74 Victoria St., 3rd Floor, Toronto, Ontario M5C 2A5 (416) 863-1100

Total assets managed	$8,000,000(U.S.)
Tax-exempt assets managed	$1,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	1
Types of accounts managed	CF
No. of portfolio managers	1

Guardian Timing Services Inc., a Canadian firm, is an equity and fixed-income manager.

Portfolio insurance techniques and market timing are used to achieve equity objectives.

In fixed income, the firm uses market timing and short-term or very long-term fixed-income securities.

As of Jan. 1, 100% of equity accounts were in U.S. and Canadian stocks and 100% of fixed-income accounts in Treasury bills.

Jean-Pierre Fruchet, president, is chief investment officer and client contact.

Middle-market spotlight: May 26.

Gulf Investment Management Inc.

580 Westlake Park Blvd., Suite 1120, Houston, Texas 77079; (713) 493-5887

Total assets managed	$178,000,00
Tax-exempt assets managed	$128,000,00
Minimum separate account	$1,000,00
Tax-exempt clients	2
Types of accounts managed	CF
No. of portfolio managers	1

Gulf Investment Management Inc. is an equity manager using a fundamental and disciplined approach that favors securities out of favor or overlooked.

The Jan. 1 tax-exempt asset mix was 88% stocks and 12% cash.

In 1985, the firm realized a $45 million net gain in new tax-exempt business.

Four clients were added.

Clients include Houston Firemen and Texas-New Mexico Power.

Thomas G. Macrini, president, is chief investment officer. T. Charles Toomey, vice president, is the client contact.

In Switzerland many traditions have their roots in the day-to-day life of the farming community. The Swiss farmer's life has never been easy, and it is impossible to stand alone. There is no way around cooperation, mutual trust, and mutual effort. The traditional Swiss game of «Hornussen» is an example for this. A player from the batting team hits the «hornuss» away with a flexible stick. The hornuss is a wooden disk weighing 80 grams which reaches an initial speed of over 200 km/h and covers a distance of up to 300 m. The fielding team tries to intercept the hornuss with large wooden shovels before it touches the ground. The sooner the fielding team perceives the approaching hornuss, the greater its chance to prevent it from reaching the ground..

Prevention requires skill

Winterthur undertakes this task systematically: risk analysis, setting of targets, assessment of deviations from the target set, measures towards claim prevention.

The WIN plan (Winterthur International Network) is an example for this: In this worldwide employee benefit program all local plans are pooled under a single international profit and loss account; this means better transparency, flexibility, and cost savings for Winterthur's clients.

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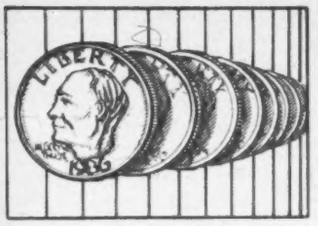

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Hagler, Mastrovita & Hewitt

1 Post Office Square, Boston, Mass. 02109; (617) 423-6199

Total assets managed	$1,100,000,000
Tax-exempt assets managed	$1,100,000,000
401(k) and 457 assets managed	$75,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	18
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	4

Hagler, Mastrovita & Hewitt Inc. is primarily an equity manager, but has fixed-income and balanced capabilities.

Its primary equity objective is to buy successful companies that are underpriced relative to earning power. Mingling sector rotation with low p/e stocks and Graham & Dodd techniques, it searches for value and actively manages the overall portfolio risk level.

For fixed income, it systematically compares expected returns and risks across the spectrum of capital market opportunities and concentrates on sectors and securities where risk-adjusted prospects are best. Interest rate anticipation and sector analysis are used.

The tax-exempt asset mix Jan. 1 was 80% stocks, 11% bonds and 9% cash.

The firm had a net gain of $250 million in tax-exempt assets in 1985. Eight tax-exempt clients were added.

Clients include Ford Foundation, Abbott Labs, Monsanto and Williams College.

Half of the research is generated internally, with 75 stocks followed closely and 150, generally.

Robert P. Mastrovita, president, is chief investment officer. Client contact is Jon L. Hagler, chairman.

Hahn Holland & Grossman

180 N. Wacker Drive, Chicago, Ill. 60606; (312) 984-3580

Total assets managed	$302,000,000
Tax-exempt assets managed	$226,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	22
Types of accounts managed	CFG
No. of portfolio managers	3
Size of research staff	2

Hahn Holland & Grossman is primarily an equity manager whose overriding concern is to conserve capital in falling markets. The firm takes a top-down approach, emphasizing evaluation of market direction, attractive industries and large-cap, value-oriented stocks.

In fixed income, portfolios are structured in regard to interest rate forecasts. They hold governments or AAA corporates, depending on yield spreads. Stock index futures are used.

The tax-exempt asset mix Jan. 1 was 85% stocks, 3% bonds and 12% cash.

Eighty percent of the research is generated in-house, with 60 stocks followed closely and 150, generally.

Clients include Adolph Coors, Chicago Laborers, Giant Foods and Fort Howard Paper.

Chief investment officer is Donald Hahn, partner. Client contact is Kenneth Grossman, partner.

Hambrecht & Quist Equity Management

235 Montgomery St., San Francisco, Calif. 94104; (415) 986-5115

Total assets managed	$38,000,000
Tax-exempt assets managed	$31,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	13
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	1

Hambrecht & Quist Equity Management specializes exclusively in emerging growth, high-technology companies.

The asset mix Jan. 1 was 89% stocks and 11% cash.

One tax-exempt client was added in 1985.

Clients include Tektronix, Pitney Bowes and Colonial Williamsburg.

Hambrecht & Quist Inc. is a limited partner.

Chief investment officer is Michael T. Jackson, general partner. Client contact is Denise M. Larkin, marketing.

John Hancock Financial Services Inc.

P.O. Box 111, Boston, Mass. 02117; (617) 421-3626

Total assets managed	$37,088,000,000
Tax-exempt assets managed:	
Total	$15,100,000,000
Pooled accounts	$2,025,000,000
Separate accounts	$800,000,000
Real estate assets managed	$788,000,000
401(k) and 457 assets managed	$80,000,000
GICs	$5,850,000,000
Annuities	$550,000,000
Other	$5,275,000,000
Minimum separate account	$10,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	14
Size of research staff	38

John Hancock Financial Services Inc. offers equity, fixed-income, balanced, real estate (commercial and timber), venture capital, convertible securities and private placement capabilities.

In equities, active quantitative management combines fundamental research with investment technology in aggressive issue selection.

In fixed income, the firm forecasts interest rate levels and trends and manages portfolio risk.

The firm offers a full range of equity-oriented real estate investment services, including commingled pools, joint ventures and direct investments, specializing in renovation and management of multifamily rental housing and timber.

The asset mix Jan. 1 was 34.5% stocks, 24.3% bonds, 3.2% cash, 25.7% equity real estate, 2.9% mortgages and 9.4% venture capital and other.

Of the total assets, $2.167 billion is managed by equity manager Independence Investment Associates, a subsidiary, of which $1.765 billion is tax-exempt. Other affiliations include John Hancock Venture Capital Management, John Hancock Property Investors Corp. and John Hancock Capital Growth Management Inc.

Clients include American Airlines, Denver Employees and Honeywell.

Chief investment officer is Stephen L. Brown, executive vice president. Client contact is Richard P. Troy, vice president.

Hanson Investment Management Co.

4000 Civic Center Drive, San Rafael, Calif. 94903; (415) 499-1400

Total assets managed	$327,000,000
Tax-exempt assets managed	$267,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	24
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	2

Hanson Investment Management Co. is an equity and balanced manager that stresses relative value and Graham & Dodd principles in its bottom-up approach to stocks.

It uses interest rate anticipation in its fixed-income approach.

The asset mix Jan. 1 was 83% stocks, 8% bonds and 9% cash.

The firm had a net gain of $85 million in new tax-exempt business in 1985; seven clients were added.

Sixty-five percent of the research is generated internally, with 70 stocks followed closely and 120, generally.

Clients include Kellogg, the city and county of San Francisco and Marin County (Calif.) Employees.

Charles Raven and Herbert M. Hanson Jr. are the chief investment officers. Mr. Hanson is the client contact.

Harbor Capital Management

265 Franklin St., Suite 1800, Boston, Mass. 02110; (617) 439-4500

Total assets managed	$1,043,000,000
Tax-exempt assets managed	$859,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	59
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	4

Harbor Capital Management Co. Inc. is a balanced manager.

Using a disciplined, bond competitive decision-making process and strong fundamental research, the firm combines selections from a focused universe of growth stocks with carefully chosen low p/e, high-yield stocks in its equity approach.

In fixed income, it follows a conservative philosophy that relies on fundamental economic and interest rate analysis.

The tax-exempt asset mix Jan. 1 was 51% stocks, 43% bonds and 6% cash.

The firm netted $144 million in new tax-exempt business in 1985; nine clients were added.

Seventy-five percent of the research is generated in-house, with 50 stocks followed closely and 200, generally.

Clients include the U.S. Military Academy, Detroit, Woods Hole Oceanographic Institute and BIC Corp.

Frederick G.P. Thorne, president, is chief investment officer. Client contact is E. William Hansen, senior vice president.

Harris Trust and Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-2121

Total assets managed	$12,900,000,000
Tax-exempt assets managed:	
Total	$8,400,000,000
Commingled accounts	$2,700,000,000
Separate accounts	$5,700,000,000
Real estate assets managed	$12,000,000
401(k) and 457 assets managed	$20,000,000
Passive assets managed	$536,000,000
Minimum separate account	$3,000,000
Tax-exempt clients:	
Commingled	440
Separate	246
Types of accounts managed	CEFGJ
No. of portfolio managers	14
Size of research staff	8

Harris Trust and Savings Bank offers equity, fixed-income, balanced, real estate, convertible securities, stock index futures and options capabilities.

Its quantitative equity approach employs a multiple factor model that incorporates low p/e, a dividend discount model, earnings acceleration, earnings estimate change and price momentum.

Its bond approach emphasizes the active management of duration, term structure and sector quality. Bond managers use quantitative models and interest rate anticipation.

Harris is an equity-oriented investor in unleveraged industrial, retail and office properties in a range between $1 million and $3 million.

Jan. 1, the mix of tax-exempt assets was 27% stocks, 46% bonds, 26% cash and 1% equity real estate.

Harris follows 225 stocks closely and 800, generally; 50% of its research is generated internally.

John C. Kirscher, vice president, is chief investment officer. Gary S. Klem, vice president, is client contact.

Hartford Life Insurance Cos.

P.O. Box 2999, Hartford, Conn. 06104-2999; (203) 683-8001

Total assets managed	$4,102,000,000
Tax-exempt assets managed:	
Total	$1,666,000,000
Pooled accounts	$63,000,000
Separate accounts	$345,000,000
Real estate assets managed	$33,000,000
401(k) and 457 assets managed	$159,000,000
GICs	$430,000,000
Other	$978,000,000
Minimum separate account	$5,000,000
Types of accounts managed	C
No. of portfolio managers	
Size of research staff	

Hartford Life Insurance Cos. offer equity, fixed-income, balanced, real estate and mortgage-backed securities capabilities.

In equities, managers stress optimal portfolio structuring by sector, industry and company and continuous recomposing, if necessary, to achieve return risk objectives. Graham & Dodd analysis is employed.

In fixed income, the firm anticipates the level and shape of the yield curve to offer clients a high return with principal value guaranteed. Interest rate anticipation is used.

In real estate, managers attempt to acquire properties with both attractive yields and the prospect of long-term appreciation. Emphasis is placed on good site selection and expert asset and property management.

The asset mix Jan. 1 was 48% stocks, 32% equity real estate, 3% mortgage-backed securities and 17% money market funds.

Clients include Citgo Petroleum, Drexel Burnham Lambert and Ryder Truck Rental.

Chief investment officer is Edward Bennett, senior vice president. Charles A. Clinton, assistant vice president, is client contact.

Haven Capital Management

605 Third Ave., New York, N.Y. 1015 (212) 986-4086

Total assets managed	$648,000,0
Tax-exempt assets managed	$436,000,0
Passive assets managed	$11,000,0
Tax-exempt clients	
Types of accounts managed	C
No. of portfolio managers	

Haven Capital Management Inc. is primarily an equity manager whose approach is growth at a reasonable price and is based on individual issue selection. This includes businesses considered undervalued. By examining historical financial data, the valuation process identifies attractively priced companies with above-average characteristics.

The fixed-income approach is based on interest rate anticipation derived from economic cycle analysis. This determines maturity selection, followed by sector and quality judgments.

The asset mix Jan. 1 was 64% stocks, 26% bonds and 10% cash.

The firm netted $62 million in new tax-exempt business in 1985; four clients were added.

Clients include Cox Enterprises, Diebold and Pennsylvania Power & Light.

Managing directors have equal investment authority. Client contact is Denis M. Turko, managing director.

Hayden, Tolzmann & Associates Inc.

P.O. Drawer 708, Bloomfield, Conn. 06002-0708; (203) 243-1481

Total assets managed	$24,000,0
Tax-exempt assets managed	$24,000,0
Real estate assets managed	$24,000,0
Minimum separate account	$10,000,0
Tax-exempt clients	
Types of accounts managed	

Hayden, Tolzmann & Associates Inc. is an investment adviser and real estate consultant that acquires existing, leased, income-producing real estate, leveraged and unleveraged.

All tax-exempt assets were in equity real estate Jan. 1.

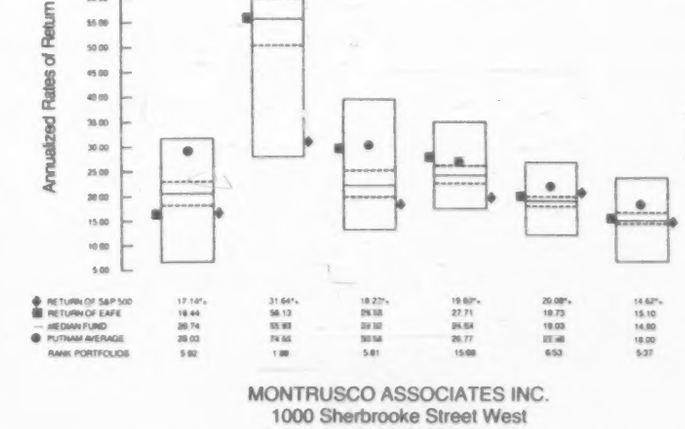
The firm netted $8.75 million in new tax-exempt business in 1985.

The firm is a subsidiary of San Jacinto Savings and Loan Association of Beaumont, Texas, which has assets of $158 million.

David C. Tolzmann, president, is chief investment officer and client contact.

Foundations and endowments will be the focus of a special section June 9.

MONTRUSCO ASSOCIATES INC. offers exclusive foreign equity management expertise to Canadian pensions Funds: P.I.A.



MONTRUSCO ASSOCIATES INC.
1000 Sherbrooke Street West
Suite 2300
Montreal, Quebec H3A 3G4
(514) 842-6464

Heartland Capital Management

36 S. Pennsylvania St., Indianapolis, Ind. 46204; (317) 633-4080

Total assets managed	$161,000,000
Tax-exempt assets managed	$128,000,000
Real estate assets managed	$3,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	50
Types of accounts managed	CEFJ
No. of portfolio managers	3

Heartland Capital Management is an equity and balanced manager.

Its overall strategy emphasizes asset mix, with growth stock and market timing used in its equity approach. It's a conservative fixed-income manager using interest rate anticipation; maturities are extended to 10 years in good markets.

As of Jan. 1, the asset mix was 66% stocks, 24% bonds, 8% cash and 2% mortgages.

Thirty percent of the research is generated in-house; 40 stocks are watched closely and 2,500, generally.

Barry F. Ebert, president, is chief investment officer and client contact.

Hedged Portfolio Advisors

327 S. LaSalle St., Chicago, Ill. 60604; (312) 461-1610

Total assets managed	$50,000,000
Tax-exempt assets managed	$0
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	6

Hedged Portfolio Advisors is a fixed-income manager with futures and options hedging capabilities.

The firm manages assets using proprietary hedging techniques with financial instruments, especially options on financial futures.

H. Phillip Becker, president, and T. William Bechtol, senior vice president, are chief investment officers and client contacts.

Heitman Advisory Corp.

180 N. LaSalle St., Chicago, Ill. 60601; (312) 855-5700

Total assets managed	$2,300,000,000
Tax-exempt assets managed	$2,100,000,000
Real estate assets managed	$2,100,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	23
Types of accounts managed	CG
No. of portfolio managers	9
Size of research staff	20

Heitman Advisory Corp. is a real estate manager whose hands-on property management/leasing allows for direct, day-to-day involvement with its properties.

All tax-exempt assets were in equity real estate as of Jan. 1.

The firm netted $538 million in new tax-exempt business in 1985. Eight clients were added.

Clients include AT&T, British Post Office Staff Superannuation Fund, Iowa Public Employees and Los Angeles County Employees.

Norman Perlmutter, is chairman of the board and chief executive officer. Client contact is David Glickman, president.

Hellman, Jordan Management Co. Inc.

50 Milk St., Boston, Mass. 02109; (617) 482-1777

Total assets managed	$1,223,000,000
Tax-exempt assets managed	$1,153,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	33
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	2

Hellman, Jordan Management Co. Inc. is an equity manager that looks for sectors exhibiting the highest rates of estimated earnings growths throughout a stock market and economic cycle with strong emphasis on market timing.

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

Options and stock index futures are used.

Interest rate anticipation is used in fixed income, with government bonds being used as equity substitutes if it will enhance the portfolios' total return.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm netted $152 million in new tax-exempt assets in 1985. Four clients were added.

Clients include Xerox, Minnesota, New Hampshire and Batus.

Sixty percent of the research is generated internally, with 60 stocks followed closely and 120, generally.

While the equity of the firm is owned by United Asset Management, a Boston-based holding company, the firm is 100% controlled by the operative principals.

Gerald R. Jordan Jr., president, is chief investment officer. Client contact is Martin M. Hale, executive vice president.

International advisers are profiled in the Aug. 4 issue.

Hibernia National Bank

Box 61540, New Orleans, La. 70161; (504) 586-5542

Total assets managed	$2,849,000,000
Tax-exempt assets managed:	
Total	$2,593,000,000
Commingled accounts	$165,000,000
Separate accounts	$2,428,000,000
401(k) and 457 assets managed	$55,000,000
Minimum separate account	$2,000,000
Tax-exempt clients:	
Commingled	234
Separate	62
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	3

Hibernia National Bank offers equity, fixed-income and balanced capabilities.

In its equity approach, it uses sector rotation and market timing techniques, looking for low p/e stocks.

The approach to bonds emphasizes interest rate anticipation and sector analysis. Hibernia uses options.

Jan. 1, the tax-exempt asset mix was 16% stocks, 79% bonds and 5% miscellaneous, including cash, loans and mortgages.

Hibernia follows 140 stocks closely and 300, generally.

Clients include Louisiana, Fort Worth, Amtrak and Alton Ochsner Medical Foundation.

Robert L. Rust, vice president and trust officer, is the chief investment officer. William J. Kearney III, vice president and trust officer, is the client contact.

Hodgson Roberton Laing

390 Bay St., Suite 1608, Toronto, Ontario M5H 2Y2 (416) 869-3320

Total assets managed	$902,000,000(U.S.)
Tax-exempt assets managed:	
Total	$347,000,000
For subsidiaries of U.S. firms	$61,000,000
International assets managed	$35,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	24
U.S. subsidiaries	1
Types of accounts managed	CEFP
No. of portfolio managers	7

Hodgson Roberton Laing Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

The firm is a fundamental, long-term equity investor, using a modified, top-down approach.

It takes no extreme positions in its fixed-income approach, and relies on interest rate anticipation.

The asset mix Jan. 1 was 50% Canadian stocks, 40% bonds, and 10% U.S. stocks.

J.W. Laing, president, is chief investment officer. Terry C. Buddin, senior vice president, is client contact.

Hoisington Investment Management Co.

333 Clay St., Suite 4440, Houston, Texas 77002; (713) 650-1004

Total assets managed	$500,000,000
Tax-exempt assets managed	$500,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	17
Types of accounts managed	CFG
No. of portfolio managers	2

Hoisington Investment Management Co. is a fixed-income manager that stresses market timing in its invest-

Growth managers with a value overlay

Favia Hill & Associates offers active management of equity, balanced and fixed income portfolios.

We serve the needs of pension and profit-sharing plans for corporations, unions, public employees, non-profit and charitable organizations.

Our new indexed bond fund—Bondex I*—features an innovative, performance oriented fee structure designed to benefit the client.

For more information, contact:
Erich G. Weissenberger, Jr. Director of Marketing
Favia Hill & Associates, Inc., 30 Rockefeller Plaza, New York, New York 10112. (212) 621-2858

Favia Hill & Associates, Inc.

*Favia Hill has been appointed Bondex I manager by Chemical Bank.

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nt approach.
ll tax-exempt assets were in bonds
f Jan. 1.
he firm had a net loss of $150 mil-
in tax-exempt business in 1985.
en percent of the research is gen-
ted in-house.
lients include Fluor, Copperweld,
W and Sara Lee.
an R. Hoisington is president and
ef investment officer, and client con-
.

J. Holt & Co. Inc.

0 Post Road West, Westport, Conn. 06880; (203) 226-8911

l assets managed	$27,000,000
-exempt assets managed	$17,000,000
imum separate account	$100,000
-exempt clients	40
es of accounts managed	CFJ
of portfolio managers	3
of research staff	4

J. Holt & Co. Inc. is a balanced nager.
he equity approach uses market ing. The fixed-income approach s interest rate anticipation empha- ng supply and demand in securities rkets.
Options, stock index futures and d-income futures are used.
he Jan. 1 tax-exempt asset mix s 10% stocks, 15% bonds and 75% h.
homas J. Holt, president, is chief estment officer. Joel C. Cohan, ector of marketing, is the client con- .

me Life Insurance Co.

entennial Ave., Piscataway, N.J. 8854; (201) 980-4401

l assets managed	$2,625,000,000
-exempt assets managed	
tal	$548,000,000
oled accounts	$41,000,000
k) and 457 assets managed	$3,000,000
s	$42,000,000
unties	$3,000,000
er	$262,000,000
-exempt clients	200
es of accounts managed	CGJ
of portfolio managers	5
of research staff	25

he Home Life Insurance Co. man- es fixed-income, balanced, guaran- d investment contracts and annuity counts.
he equity approach seeks above- erage total returns by investing in -risk investments, avoiding periods vhich investment capital is lost.
n fixed income, the objective is high al return while avoiding a negative al return in any single year. Sev- y percent of the portfolio is laddered er seven years; 30% is actively naged.
he asset mix Jan. 1 was 70% cks, 10% bonds and 20% cash.
ohn Fabian, senior vice president, chief investment officer. Client con- t is Ted Ludlam, senior vice presi- nt.

rgan Investment Counsel

1 Richmond St. West, Suite 1108, Toronto, Ontario M5H 1T1; (416) 362-7907

l assets managed	$32,000,000(U.S.)
-exempt assets managed	$10,000,000
rnational assets managed	$4,000,000
imum separate account	$1,000,000
-exempt clients	5
es of accounts managed	CU
of portfolio managers	2

Horgan Investment Counsel Ltd., a nadian firm, is an equity, fixed- ome and balanced manager, with ecial expertise in small capitalization nadian stocks and foreign equities.
he company considers itself a ue-oriented equity investor without adherence to any single approach.
Fixed-income portfolios are concen- ted in highest quality issues.
As of Jan. 1, the asset mix was 25% nadian stocks, 25% bonds, 40% sh and 10% U.S. stocks.
Patrick Horgan, president, is chief estment officer and client contact.

tchkis and Wiley

0 W. Sixth St., Suite 540, Los Angeles, Calif. 90017; (213) 23-4073

al assets managed	$1,500,000,000
t-exempt assets managed	$1,500,000,000
Tax-exempt clients	24
Types of accounts managed	CEFG
No. of portfolio managers	3

Hotchkis and Wiley is primarily an equity manager, whose style emphasizes preservation of capital and the power of dividend return compounded.

In late 1985, it started a fixed-income and mutual fund division, as well.

The Jan. 1 tax-exempt asset mix was 84% stocks, 6% bonds, 8% cash and 2% mutual funds.

Managers follow 100 stocks closely and 250, generally; 30% of research is generated internally.

Clients include Rockwell, GTE, Monsanto and Oregon.

John F. Hotchkis and George Wiley are chief investment officers. George J. Rebhan, director of marketing, is the client contact.

HT Investors Inc.

321 S. Main St., Providence, R.I. 02903; (401) 276-6100

Total assets managed	$950,000,000
Tax-exempt assets managed	$950,000,000
Real estate assets managed	$9,000,000
International assets managed	$6,000,000
401(k) and 457 assets managed	$11,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	170
Types of accounts managed	CEFJ
No. of portfolio managers	8

HT Investors Inc. offers equity, fixed-income, balanced, real estate and international account management.

Its equity approach emphasizes relative valuation primarily through the use of growth and growth cyclical companies. It is a relative value asset allocator with investment horizons between six months and one year. Options are used.

Its active bond management style often is geared to short and intermediate securities with a willingness for cash equivalents.

The real estate approach has a preference for high-quality, recently constructed, substantially rented commercial and industrial properties in the Northeast and selected Midwest areas.

The Jan. 1 tax-exempt asset mix was 47% stocks, 43% bonds, 9% cash and 1% equity real estate.

Clients included Textron, Providence Journal and Brown & Sharpe Manufacturing.

Henry M. Greenleaf Jr., president, is the chief investment officer. Client contact is J. Richard Schroder, vice president-marketing director.

Hughes, King & Co. Ltd.

150 York St., Suite 1808, Toronto, Ontario M5H 3S5; (416) 863-0687

Total assets managed	$75,000,000(U.S.)
Tax-exempt assets managed	$52,000,000
Minimum separate account	$250,000
Tax-exempt clients	14
Types of accounts managed	CEF
No. of portfolio managers	3

Hughes, King & Co. Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

The firm takes a top-down approach to equities, using Graham & Dodd techniques and market timing. It is partial to growth stocks.

In fixed income, managers assess the interest rate outlook and attempt to maximize return largely by adjusting the average term of the portfolio. Quality and active management are stressed.

The asset mix Jan. 1 was 55% Canadian stocks, 25% bonds, 10% cash and 10% U.S. stocks.

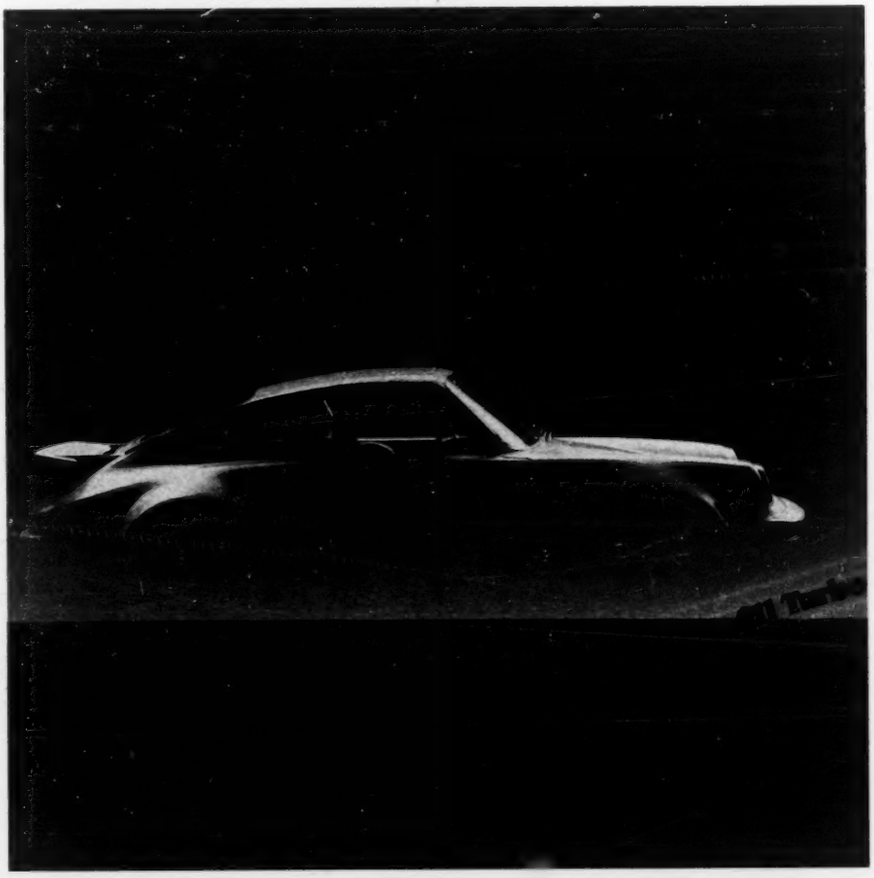
C.W. King, president, is chief investment officer. Client contacts are R.S. Stuart and G.C. Noble, executive vice presidents.

Huntington National Bank

Huntington Bank Building, P.O. Box 5065, Cleveland, Ohio 44101; (216) 344-6525

Total assets managed	$1,200,000,000
Tax-exempt assets managed	$370,000,000
International assets managed	$6,000,000
401(k) and 457 assets managed	$20,000,000
Passive assets managed	$17,000,000
Minimum separate account	$500,000
Tax-exempt clients	652
Types of accounts managed	CEFGJ
No. of portfolio managers	6

Huntington National Bank is an



quity, fixed-income and balanced
nanager.

The equity approach uses com-
uter-driven analysis and valuation of
tocks resulting in sector allocation
nd individual selection.

The fixed-income approach uses
nterest rate anticipation and sector
nalysis, as well as analysis of Trea-
ury/corporate spreads and the yield
urve.

The Jan. 1 tax-exempt asset mix
as 60% stocks, 30% bonds and 10%
ash.

In 1985, the firm realized a $720,000
et gain in new tax-exempt business.
lore than 300 clients were added.

Managers follow 180 stocks closely
nd 1,000, generally; 20% of research
s generated internally.

Clients include American Aggre-
ates, American Electric Power,
Cleveland Foundation and Lancaster
Colony.

Douglas V. Epp, vice president, is
hief investment officer. Benjamin Bai-
ey, senior vice president, is the client
ontact.

Hutchinson National Bank and Trust Co.

P.O. Box 1488, Hutchinson, Kan. 67504; (316) 662-0561

Total assets managed	$227,000,000
Tax-exempt assets managed:	
Total	$55,000,000
Commingled accounts	$12,000,000
Separate accounts	$43,000,000
Real estate assets managed	$3,000,000
Passive assets managed	$10,000,000
Minimum separate account	$100,000
Tax-exempt clients:	
Commingled	184
Separate	77
Types of accounts managed	CEFGJ
No. of portfolio managers	3
Size of research staff	1

Hutchinson National Bank and Trust Co. offers equity, fixed and balanced capabilities. It also has an options fund.

Through the use of market timing, combined with business cycle timing, Hutchinson takes a top-down approach to the equity market. Industry segment rotation also is used.

The bond approach places a high priority on marketability with interest rate anticipation as a primary catalyst for any buys and sells.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 28% stocks, 53% bonds, 5% cash, 5% equity real estate, 5% mortgages, 1% mortgage-backed securities and 3% limited partnerships.

The bank has $10 million in dedicated and immunized bond portfolios.

Dale E. Page, vice president-investments, is the chief investment officer and client contact.

Hutton Capital Management

17 Battery Place, Suite 314, New York, N.Y. 11004; (212) 742-6557

Total assets managed	$1,297,000,000
Tax-exempt assets managed	$1,189,000,000
401(k) and 457 assets managed	$70,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	359
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	50

Hutton Capital Management is an equity and balanced manager.

The equity approach uses Graham & Dodd method. Equities are selected from a proprietary valuation process that is confirmed by research sources.

The asset mix between fixed-income and cash securities is based on interest rate anticipation. Individual selection is risk averse, with maturities generally less than 10 years.

The Jan. 1 tax-exempt asset mix was 55% stocks, 31% bonds and 14% cash.

In 1985, the firm realized a $224 million net gain in new tax-exempt business; 16 clients were added.

Clients include GTE, Middle South Utilities, Idaho and Seafarers' International Union.

Managers follow 50 stocks closely and 600, generally; 10% of research is generated internally.

The firm is an autonomous and physically separate division of E.F. Hutton & Co. Inc.

Robert L. Ardizzone, director, is chief investment officer. Peter S. Hagerman, director and chief operating officer, is the client contact.

Deutsche Bank and Porsche: a driving force on the German stock market.

Porsche went public in May, 1984. By the end of 1985 Porsche shares had risen 84% over their offering price – from US $* 285.75 per share to US $* 526.05. Of course, past performance is no assurance of future performance, but Deutsche Bank handled the I.P.O.'s of 17 of Germany's finest companies over that period, and all of them had increased in value by the end of 1985.* (Complete performance record available upon request.)

Porsche's performance illustrates the growth potential of German equity markets. Last year, the F.A.Z. Index, a composite of Germany's leading public companies, was up 118.9% (in dollar terms).

Deutsche Bank has accounted for 75% of the value of all I.P.O.'s on the German stock market over the past two years. And a wide number of qualified companies show the potential to go public in the near future. Many will use Deutsche Bank's proven underwriting capabilities to help assure the success of their offerings.

The German equity market still offers many opportunities for American institutional investors. Deutsche Bank Capital Corporation, Deutsche Bank's U.S. investment banking subsidiary, provides the research, information and execution capability to make German equities a driving force in your international portfolio.

Deutsche Bank Capital Corporation
Member, New York Stock Exchange and other principal U.S. Exchanges
International Desk
40 Wall Street
New York, NY 10005
Phone 212-612-0690

* exchange rates as of respective dates

Deutsche Bank at a glance (Dec. 31, 1985):

- *business volume (bn US $*)* 98.6
- *branches worldwide* 1,410
- *employees* 48,851
- *stockholders* 245,000

Deutsche Bank is Germany's largest commercial and investment bank.

Deutsche Bank Capital Corporation

Idaho First National Bank

P.O. Box 7928, Boise, Idaho 83707; (208) 383-7252

Total assets managed	$615,000,000
Tax-exempt assets managed:	
Total	$312,000,000
Commingled accounts	$10,000,000
Separate accounts	$302,000,000
Real estate assets managed	$76,000,000
401(k) and 457 assets managed	$10,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	210
Separate	410
Types of accounts managed	CEFGJ
No. of portfolio managers	3
Size of research staff	1

Idaho First National Bank offers equity, fixed-income and balanced capabilities.

The equity approach uses a top-down macro view to identify specific industries and companies with relative undervaluation within the current economic climate. Options are used.

In bonds, interest rate anticipation is emphasized in determining the direction and sector mix. Adjustments are made when several predetermined yield spreads and return objectives are realized.

Real estate investments are made through the purchase of open-end pooled funds.

Jan. 1, the tax-exempt asset mix was 35% stocks, 57% bonds, 2% cash, 1% equity real estate, 2% mortgages, 2% mortgage-backed securities and 1% guaranteed investment contracts.

Rudy M. Thomas, vice president and manager of trust investments, is chief investment officer. John F. Hart, assistant vice president-employee benefits investment officer, is the client contact.

IDS Equity/Fixed-Income Advisors

3100 IDS Tower, Minneapolis, Minn. 55474; (612) 372-3079

Total assets managed	$2,835,000,000
Tax-exempt assets managed	$2,835,000,000
401(k) and 457 assets managed	$159,000,000
Passive assets managed	$36,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	44
Types of accounts managed	CEFG
No. of portfolio managers	7
Size of research staff	28

IDS Equity/Fixed-Income Advisors is an equity, fixed-income and balanced manager.

In equities, it takes a top-down, sector-rotational approach to manage portfolios of large-cap, blue-chip stocks.

In fixed-income, it uses interest rate anticipation and sector analysis with a top-down, active approach. Stock index futures are used.

The tax-exempt asset mix Jan. 1 was 81.9% stocks, 10.7% bonds and 7.4% cash.

Managers follow 600 stocks closely and 2,000, generally; 40% of research is generated internally.

Clients include PacTel, California Institute of Technology, Screen Actors Guild-Producers Pension Plan and Virginia Supplemental.

The firm is a member of IDS Advisory Group, which is owned by IDS Financial Services Inc.

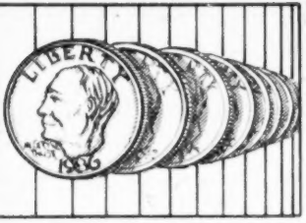
Peter J. Anderson, president, is chief investment officer. Cheryl K. Gruetzmacher, vice president and director of marketing, is the client contact.

IDS Growth Spectrum Advisors Inc.

3100 IDS Tower, Minneapolis, Minn. 55474; (612) 372-3079

Total assets managed	$116,000,000
Tax-exempt assets managed	$102,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	11
Types of accounts managed	CG
No. of portfolio managers	2

IDS Growth Spectrum Advisors Inc. is an equity manager specializing in growth stock using top-down and bottom-up approaches for its portfolios.



The Jan. 1 tax-exempt asset mix was 94.7% stocks and 5.3% cash.

Clients include PacTel, Iowa Public Employees and Federal Express.

The firm is a member of IDS Advisory Group, which is owned by IDS Financial Services Inc.

Edward G. Hartmann, president, is chief investment officer. Cheryl K. Gruetzmacher, vice president and director of marketing, is the client contact.

IDS International Inc.

3100 IDS Tower, Minneapolis, Minn. 55474; (612) 372-3079

Total assets managed	$377,000,000
Tax-exempt assets managed	$299,000,000
International assets managed	$187,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	14
Types of accounts managed	CG
No. of portfolio managers	3

IDS International Inc. manages international and global portfolios of U.S. tax-exempt assets combining a top-down and a bottom-up approach.

The Jan. 1 tax-exempt asset mix was 95.2% stocks and 4.8% cash.

Managers follow 100 stocks closely and 400, generally; 20% of research is generated internally.

Clients include Lear Siegler, Honeywell, Allegheny and Cargill.

The firm is a member of IDS Advisory Group, which is owned by IDS Financial Services Inc.

Peter L. Lamaison, president, is chief investment officer. Cheryl K. Gruetzmacher, vice president and director of marketing, is the client contact.

The Illinois Co. Inc.

30 N. LaSalle St., Suite 4000, Chicago, Ill. 60602; (312) 444-2100

Total assets managed	$208,000,000
Tax-exempt assets managed	$68,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	14
Types of accounts managed	CFG
No. of portfolio managers	3
Size of research staff	4

The Illinois Co. Inc. is a balanced manager.

Its equity approach uses Graham & Dodd and its fixed-income approach, interest rate anticipation. Options are used.

The Jan. 1 tax-exempt asset mix was 5% stocks, 50% bonds and 45% cash.

In 1985, the firm had a net loss of $118 million in tax-exempt business. Five clients were added.

The firm is a wholly owned subsidiary of Land of Lincoln Savings & Loan.

Paul H. Fricke, vice president, is chief investment officer and client contact.

Indiana Investment Advisors

1 Indiana Square, Department 101, Indianapolis, Ind. 46266; (317) 266-6198

Total assets managed	$2,796,000,000
Tax-exempt assets managed	$2,374,000,000
Real estate assets managed	$71,000,000
401(k) and 457 assets managed	$50,000,000
Passive assets managed	$4,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	700
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	2

Indiana Investment Advisors is an equity, fixed-income and balanced manager.

In equities, managers use growth-oriented investing with prime emphasis on earnings growth and consistency in growth. Additional screening factors include valuation and financial strength/market capitalization.

In fixed income, active managers concentrate on risk-reward, maturity and sector judgments instead of placing complete reliance on interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 10% stocks, 80% bonds, 5% cash, 3% equity real estate and 2% miscellaneous.

Clients include Indiana State Teachers, United Brotherhood of Carpenters and Ameritech.

P. Roger Kumler is chief investment officer. Sally J. Phillips, vice president and business development officer, is client contact.

Wm. A. Inskeep & Co.

12934 Kenwood Lane SW, Suite 21, Fort Myers, Fla. 33907; (813) 939-5161

Total assets managed	$12,000,000
Tax-exempt assets managed	$7,000,000
Minimum separate account	$300,000
Tax-exempt clients	10
Types of accounts managed	CE
No. of portfolio managers	1

Wm. A. Inskeep & Co. is an equity, fixed-income and balanced manager.

For equity investments, the firm follows growth stock and Graham & Dodd approaches in seeking issues with strong long-term potential.

In fixed income, it employs a risk-averse strategy, using only high-quality, short- and intermediate-term issues.

The tax-exempt asset mix Jan. 1 was 75% stocks, 20% bonds and 5% cash.

William A. Inskeep is chief investment officer and client contact.

Institutional Capital Corp.

230 W. Monroe St., Suite 2930, Chicago, Ill. 60606; (312) 641-7200

Total assets managed	$893,000,000
Tax-exempt assets managed	$893,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	14
Types of accounts managed	CEF
No. of portfolio managers	5
Size of research staff	6

Institutional Capital Corp. is an equity manager emphasizing sector rotation and market timing.

Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 90% stocks, 4% bonds and 6% cash.

Clients include Jewel, Quaker Oats, Litton Industries and S.C. Johnson & Son.

William A. Maloney, president, is chief investment officer. Russell C. Walter, executive vice president, is the client contact.

Institutional Portfolio Services Ltd.

1 First National Plaza, Suite 2594, Chicago, Ill. 60603; (312) 236-5388

Total assets managed	$65,000,000
Tax-exempt assets managed	$50,000,000
Minimum separate account	$250,000
Tax-exempt clients	35
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	2

Institutional Portfolios Services Ltd. is an equity, fixed-income and balanced manager.

The equity approach uses growth stock, low p/e, sector rotation and Graham & Dodd principles with an emphasis on industry concentration and covered selling of options.

The fixed-income approach uses interest rate and economic forecasting.

The asset mix Jan. 1 was 65% stocks and 35% bonds.

B.P. Pai, president, is chief investment officer. Denise M. Iwaniec, executive assistant, is the client contact.

Integrated Resources Asset Management Corp.

666 Third Ave., New York, N.Y. 10017; (212) 551-6700

Total assets managed	$776,000,000
Tax-exempt assets managed	$100,000,000
Minimum separate account	$100,000
Types of accounts managed	CFG
No. of portfolio managers	3
Size of research staff	4

Integrated Resources Asset Management Corp. is an equity and balanced manager.

In equities, the firm superimposes timely investment themes on well-researched companies that will benefit from the theme.

The firm is a subsidiary of Integrated Resources Inc.

Harvey P. Eisen, president, is chief investment officer. Jonathan A. Noonan, director of institutional marketing, is the client contact.

InterFirst Investment Management Inc.

P.O. Box 83000, Dallas, Texas 75283-1420; (214) 977-4358

Total assets managed	$6,400,000,000
Tax-exempt assets managed:	
Total	$2,298,000,000
Commingled accounts	$464,000,000
Separate accounts	$1,834,000,000
Real estate assets managed	$350,000,000
401(k) and 457 assets managed	$200,000,000
Passive assets managed	$35,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	400
Separate	42
Types of accounts managed	CEFGJ
No. of portfolio managers	18
Size of research staff	4

InterFirst Investment Management Inc. offers equity, fixed-income, balanced and real estate management.

In equities, growth stocks are selected with valuation disciplines and a Southwestern bias.

In fixed income, it emphasizes active management of intermediate bonds providing stability and real rates of return. The firm also offers dedicated and immunized strategies.

In real estate, it purchases income-producing properties in the Southwest.

The Jan. 1 tax-exempt asset mix was 50% stocks, 30% bonds (including $10 million in mortgages), 10% cash and 10% equity real estate.

It follows 100 stocks closely and 300, generally; 40% of the research is generated internally.

Clients include Conoco, Rockwell, Southwestern Bell and Exxon.

David E. Hoener, president, is the chief investment officer. The client contact is Nathan O. Finke, senior vice president.

Interstate Asset Management Inc.

2600 NCNB Plaza, Charlotte, N.C. 28280; (704) 379-9097

Total assets managed	$40,000,000
Tax-exempt assets managed	$20,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$500,000
Tax-exempt clients	20
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	1

Interstate Asset Management Inc. is a balanced manager.

The equity approach uses value as defined by growth and financial measures. The fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 35% stocks, 30% bonds and 35% cash.

The firm's parent company is Interstate Securities Inc.

J. Don Raines and Donald J. Toney, managing directors, are chief investment officers. Mr. Raines is the client contact.

INVESCO Capital Management Inc.

100 Colony Square, Suite 1400, 1175 Peachtree St., Atlanta, Ga. 30361; (404) 892-0875

Total assets managed	$8,000,000,000
Tax-exempt assets managed	$7,900,000,000
Passive assets managed	$75,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	83
Types of accounts managed	CEFGJ
No. of portfolio managers	11

INVESCO Capital Management Inc. is an equity, fixed-income and balanced manager.

The equity approach uses sector rotation and Graham & Dodd methods with fundamental, bottom-up analysis. Primary emphasis is on issue selection.

The active fixed-income approach is based on strategy and research. Sector analysis and credit are emphasized.

Options and stock-index and fixed-income futures are used.

The asset mix Jan. 1 was 60.2% stocks, 30.2% bonds and 9.6% cash.

In 1985, the firm realized a $1.037 billion net gain in tax-exempt business. Thirteen clients were added.

Clients include General Motors, Boeing, NCR Corp. and Texaco.

Wendell M. Starke, president, is chief investment officer. Willis M. Everett, principal, is client contact.

Investment Advisers Inc.

1100 Dain Tower, P.O. Box 357, Minneapolis, Minn. 55440; (612) 371-2939

Total assets managed	$4,000,000,000
Tax-exempt assets managed	$3,700,000,000
Real estate assets managed	$70,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	107
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	2

Investment Advisers Inc. is an equity, fixed-income, balanced and venture capital manager.

In equities, sector rotation is used with a top-down credit cycle approach. As much as 80% of the equity portfolio can be invested in eight to 10 industry groups, which are rotated over a market cycle.

The fixed-income strategy revolves around credit cycle analysis. Maturity selection follows a cyclical approach.

The asset mix Jan. 1 was 60% stocks and 40% bonds.

In 1985, the firm realized a $275 million net gain in new tax-exempt business. Eight clients were added.

Clients include Illinois Carpenters, UFCW National Trust, Newmont Mining and Houston Police.

The firm is affiliated with Hill Samuel Group PLC.

Noel Rahn, chief executive officer, is chief investment officer. I.P. (Kip) Knelman, senior vice president, is the client contact.

Investment Advisors Inc.

1100 Louisiana, Suite 2600, Houston, Texas 77002; (713) 659-2611

Total assets managed	$377,000,000
Tax-exempt assets managed	$291,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	29
Types of accounts managed	CEFG
No. of portfolio managers	6

Investment Advisors Inc. is an equity, fixed-income and balanced manager.

The equity approach uses growth stocks and sector rotation with top-down economic analysis identifying the most attractive industries. Portfolios are generally conservative and growth oriented.

The fixed-income approach is based on yield curve and macroeconomic analyses as well as interest rate anticipation. Yield differentials and spreads determine sector investment.

The asset mix Jan. 1 was 55% stocks, 40% bonds and 5% cash.

Clients include Delta Drilling and the cities of Shreveport and Baton Rouge, La., and San Jose, Calif.

Marvin H. McMurrey, president, is chief investment officer. Thomas A. Wimberly, executive vice president, is client contact.

Investment and Capital Management Corp.

1701 Golf Road, 2 Continental Towers, Suite 504, Rolling Meadows, Ill. 60008; (312) 439-8500

Total assets managed	$1,015,000,000
Tax-exempt assets managed	$941,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	59
Types of accounts managed	CEFGJ
No. of portfolio managers	6

Investment and Capital Management Corp. is an equity, fixed-income, and balanced manager.

The firm's equity approach consists of emerging growth, sector rotation, and market timing.

Interest rate anticipation, sector analysis and duration analysis are used in fixed income. When opportunities are presented, arbitrage is undertaken.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

Clients include Kansas Public Employees, National Can and New Orleans Firefighters.

The firm is a wholly owned subsidiary of Chemical New York Corp.

Donald J. Killian, president, is chief investment officer. Jack A. Pirrie, vice president, is client contact.

The Investment Counsel Co.

56 E. Pine St., Suite 200, Orlando, Fla. 32801; (305) 841-6241

Total assets managed	$450,000,000
Tax-exempt assets managed	$424,000,000
Real estate assets managed	$6,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	88
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	4

The Investment Counsel Co. is an equity, fixed-income and balanced manager. It also manages real estate through ICC Realty Advisors Inc.

In equities, the firm searches for low p/e and out-of-favor stocks and rotates from overvalued companies to undervalued ones.

In fixed income, maturities are varied relative to interest rate trends.

Its real estate approach uses debt and equity with strongest safeguards.

The asset mix Jan. 1 was 15% stocks, 60% bonds, 17% cash, 2% real estate and 6% mortgages.

Clients include American Petroleum Institute, Southern Engineering and city of Miami Beach.

John P. Meehan, president, is chief investment officer. Steve Cochrane and David M. Brock are client contacts.

Investment Counselors of Maryland Inc.

803 Cathedral St., Baltimore, Md. 21201; (301) 539-3838

Total assets managed	$1,446,000,000
Tax-exempt assets managed	$1,166,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	95
Types of accounts managed	CEFG
No. of portfolio managers	6
Size of research staff	2

Investment Counselors of Maryland Inc. is an equity, fixed-income and balanced manager.

Four principles form the basis of its equity approach: The equity market is inefficient; stocks with low p/e ratios provide superior returns; price is the primary determinant in superior stock selection; and an actively applied sell discipline will increase performance.

Sector analysis is used in the core portion of the portfolio and interest rate anticipation is used in the active portion.

The asset mix Jan. 1. was 37% stocks, 24% bonds, 15% cash, 17% mortgage-backed securities and 7% floating rate notes.

Clients include AT&T, United States Catholic Conference, city of Cincinnati and Johns Hopkins Hospital.

Equitable Bancorporation owns 25% of the firm's common stock.

Craig Lewis, president, is chief investment officer. Robert B. Russell II, executive vice president, is the client contact.

Investment Management Inc.

2700 E. 51st St., Suite 340, Tulsa, Okla. 74105; (918) 742-3031

Total assets managed	$32,000,000
Tax-exempt assets managed	$8,000,000
401(k) and 457 assets managed	$500,000
Minimum separate account	$100,000
Tax-exempt clients	15
Types of accounts managed	CEJ
No. of portfolio managers	3

Investment Management Inc. is a balanced manager.

Its equity approach is based on

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

quantitative analysis, while its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 5% stocks and 95% bonds.

D.J. Rubottom, president, is chief investment officer. Stephen M. Dudash and Philip W. Wood are client contacts.

Investors Group Trust Co.

280 Broadway, Winnipeg, Manitoba R3C 3B6; (204) 949-8488

Total assets managed	$300,000,000(U.S.)
Tax-exempt assets managed:	
Total	$300,000,000
Real estate assets managed	$87,000,000
International assets managed	$12,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	1,022
Types of accounts managed	CEFPU
No. of portfolio managers	10
Size of research staff	2

Investors Group Trust Co. Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

In equities, managers maximize capital appreciation potential without assuming undue risk. A conservative stock selection process stresses sector rotation and liquidity factors.

In fixed income, managers blend an actively traded, high-quality bond portfolio with mortgages, altering the ratio depending on interest rate spreads and the state of the economic cycle.

The asset mix Jan. 1 was 27% Canadian stocks, 30% bonds, 11% cash, 29% mortgages and 3% U.S. stocks.

The Investors Group has a controlling interest in Great-West Life Assurance Co. and Montreal Trustco Inc.

P.E. Newman, senior vice president-investments, is chief investment officer. Client contact is C.F. Schmidt, vice president.

Investors Management Services Inc.

P.O. Box 700, Birmingham, Mich. 48012; (313) 642-1020

Total assets managed	$150,000,000
Tax-exempt assets managed	$79,000,000
International assets managed	$1,000,000
Minimum separate account	$90,000
Tax-exempt clients	45
Types of accounts managed	CEFJ
No. of portfolio managers	2

Investors Management Services Inc. is a balanced manager.

Its equity approach deals with higher-quality issues, combining sector rotation and market timing to capitalize on inefficiencies in the market.

In fixed income, managers attempt to maximize returns by shortening or lengthening maturities based on interest rate forecasts.

The asset mix Jan. 1 was 55% stocks, 35% bonds and 10% cash.

Richard H. Wiggins, president, is chief investment officer. Gerald R. DeHondt, vice president, is the client contact.

Investors Research Co.

1900 State St., Suite H, Santa Barbara, Calif. 93101; (805) 569-1078

Total assets managed	$175,000,000
Tax-exempt assets managed	$101,000,000
Minimum separate account	$200,000
Tax-exempt clients	39
Types of accounts managed	CF
No. of portfolio managers	4
Size of research staff	2

Investors Research Co. is an equity manager using growth stocks and market timing.

Managers invest aggressively during rising markets and switch into cash equivalents during downturns. Market action and stock price trends are main determinants of buying or selling points.

The asset mix Jan. 1 was 50% stocks and 50% cash.

J.R. Noble, J.H. Caloudes and E.T. Wells, general partners, are chief investment officers. Michael Tinney, office manager, is client contact.

Investors Research Corp.

605 W. 47th St., Kansas City, Mo. 64112; (816) 531-5575

Total assets managed	$3,319,000,000
Tax-exempt assets managed	$647,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	34
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	3

Investors Research Corp. is an equity and fixed-income manager.

Its equity strategy emphasizes quality growth with fundamental and technical momentum.

In fixed income, quality short- to intermediate-term issues are used and aggressively swapped.

The asset mix Jan. 1 was 96% stocks and 4% bonds.

Clients include International Paper, Missouri State Employees, Father Flanagan's Boys Town and International Sheetmetal Workers.

James E. Stowers Jr., president, is chief investment officer. Stephen M. Barney and John F. Rogers, vice presidents, are client contacts.

Irving Trust Co.

1 Wall St., New York, N.Y. 10015; (212) 635-1707

Total assets managed	$7,000,000,000
Tax-exempt assets managed:	
Total	$3,400,000,000
Commingled accounts	$152,000,000
Separate accounts	$3,248,000,000
Passive assets managed	$631,000,000
Minimum separate account	$10,000,000
Tax-exempt clients:	
Commingled	3
Separate	77
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	15

Irving Trust Co. is an equity, fixed-income, balanced, international manager, with passive equity and dedicated/immunized portfolio capabilities.

In equities, the firm believes in a value-oriented approach focusing on identifying companies that are undervalued or will exhibit accelerated earnings growth. Options are used.

The fixed-income is traditional. Maturities are shifted based on bond yields relative to interest rate and inflation forecasts. Cyclical factors are considered.

The Jan. 1 tax-exempt asset mix was 18% stocks, 81% bonds and 1% cash.

Managers follow 50 stocks closely and 750, generally; 90% of research is generated internally.

Clients include Peat Marwick, Mitchell, Hawaii and Hamilton College.

Gary Yalen, senior vice president, is chief investment officer. Alec J. McAuley and John Ignieri, vice presidents, are client contacts.

Ivory & Sime International

39 Main St., Chatham, N.J. 07928; (201) 635-6700

Total assets managed	$148,000,000
Tax-exempt assets managed	$135,000,000
International assets managed	$1,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	4
Types of accounts managed	CG
No. of portfolio managers	32

Ivory & Sime International Inc. is an equity and international manager.

In equities, a long-term, fundamental, research-based approach is used with primary emphasis on stock selection and identifying superior companies in a global context. Growth stocks are sought.

Fixed income is used as an equity alternative.

The asset mix Jan. 1 was 95% stocks, 2% bonds and 3% cash.

Alex Hammond-Chambers, deputy chairman, is chief investment officer. Keith H. Wood, president, is client contact.

James Investment Research

P.O. Box 8, Alpha, Ohio 45301; (513) 426-7640

Total assets managed	$140,000,000
Tax-exempt assets managed	$89,000,000
401(k) and 457 assets managed	$2,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	46
Types of accounts managed	CEFJ
No. of portfolio managers	3
Size of research staff	7

James Investment Research Inc. is an equity, fixed-income and balanced

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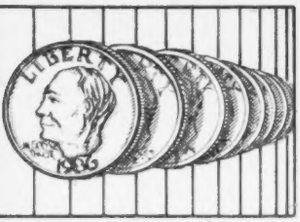

manager.

In equities, managers use a variety of quantitative tools in identifying high value and good appreciation potential.

Its fixed-income approach uses quantitative tools to identify major moves in interest rates.

The asset mix Jan. 1 was 79% stocks, 19% bonds and 2% cash.

Francis E. James, president, is chief investment officer. Frank E. James III, vice president, is client contact.

James River Capital Management Inc.

909 E. Main St., Suite 321, Richmond, Va. 23219; (804) 780-3207

Total assets managed	$71,000,000
Tax-exempt assets managed	$20,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$500,000
Tax-exempt clients	19
Types of accounts managed	CEFGJ
No. of portfolio managers	3

James River Capital Management Inc. is an equity and balanced manager.

Asset allocation and stock selection are driven by systematic analysis of valuation, fundamental and psychological data.

Stocks are screened for low p/es, earnings momentum and reported earnings above expectations.

In fixed income, computer-based models analyze economic and monetary rate of change data.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The firm is a wholly owned subsidiary of S&S Financial Services Inc.

Paul C. Munson, managing director, is chief investment officer. Charles K. Fox, managing director, is client contact.

Jamison, Eaton & Wood Inc.

39 Main St., Chatham, N.J. 07928; (201) 635-6700

Total assets managed	$5,060,000,000
Tax-exempt assets managed	$46,000,000
International assets managed	$1,600,000
Minimum separate account	$500,000
Tax-exempt clients	32
Types of accounts managed	CEFG
No. of portfolio managers	4

Jamison, Eaton & Wood Inc. is a balanced manager.

Its stock selection methodology is value oriented, emphasizing growth in earnings and dividends and sector rotation.

Fixed-income decisions are balanced between interest rate anticipation and sector analysis. Credit and arbitrage are incorporated.

The asset mix Jan. 1 was 57% stocks, 30% bonds and 13% cash.

Clients include South Carolina, Homasote and Medical Society of New Jersey.

Keith H. Wood, chairman, is chief investment officer and client contact.

Jarislowsky, Fraser & Co.

65 Queen St. W., Suite 1501, Toronto, Ontario M5H 2M5; (416) 363-7417

Total assets managed	$2,800,000,000(U.S.)
Tax-exempt assets managed:	
Total	$2,500,000,000
For subsidiaries of U.S. firms	$700,000,000
Real estate assets managed	$25,000,000
International assets managed	$850,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	98
U.S. subsidiaries	20
Types of accounts managed	CEFPU
No. of portfolio managers	3
Size of research staff	5

Jarislowsky, Fraser & Co., a Canadian firm, is primarily a balanced manager, but also has equity and fixed-income capabilities.

In equities, the firm purchases undervalued stocks with strong proven management. Growth stocks, Graham & Dodd analysis and market timing are used.

In fixed income, interest rate anticipation is used, and managers seek safety of principal and optimization of yield within a framework of an average term to maturity.

The asset mix Jan. 1 was 31% Canadian stocks, 47% bonds, 10% cash, 1% mortgages and 11% U.S. stocks.

Clients include McGill University, Sears Canada, Abitibi Price and Queens University.

Stephen A. Jarislowsky is chief investment officer. Lorne T. Wickerson is client contact.

JCB Asset Management

170 4th Ave. N., Nashville, Tenn. 37219; (615) 748-9422

Total assets managed	$101,000,000
Tax-exempt assets managed	$72,000,000
Minimum separate account	$500,000
Tax-exempt clients	56
Types of accounts managed	CEFG
No. of portfolio managers	2

JCB Asset Management is an equity and balanced manager.

Earnings growth and relative strength are the primary criteria for equity selection. Growth stocks are sought.

Fixed-income investments are passive, and laddered short- to intermediate-term bond maturities are sought.

The asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

The firm is an affiliate of J.C. Bradford and Co.

Norris Nielsen, president, is chief investment officer. Tom Pollock, vice president, is client contact.

Jennison Associates Capital

466 Lexington Ave., New York, N.Y. 10017; (212) 421-1000

Total assets managed	$18,000,000,000
Tax-exempt assets managed	$18,000,000,000
Tax-exempt clients	86
Types of accounts managed	CEF
No. of portfolio managers	7
Size of research staff	6

Jennison Associates Capital Corp., an equity, fixed-income and balanced manager, follows growth stocks.

In fixed-income, it actively manages long-term, high-quality bonds and handles controlled accounts. It also manages dedicated and quantitatively structured accounts.

The mix of tax-exempt assets Jan. 1 was 34.4% stocks, 65% bonds and 0.6% cash.

Half the research is generated internally.

Jennison Associates Capital Corp. is a subsidiary of Prudential Insurance Co. of America.

Spiros Segalas, director and senior vice president, is the chief investment officer. John H. Hobbs, president, is the client contact.

Jenswold, King & Associates

5151 San Felipe, Suite 1450, Houston, Texas 77056-3698; (713) 961-0462

Total assets managed	$145,000,000
Tax-exempt assets managed	$55,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	36
Types of accounts managed	CEFJ
No. of portfolio managers	3
Size of research staff	1

Jenswold, King & Associates is an equity and balanced manager.

Managers describe themselves as eclectic contrarians, relying on low p/e, emerging growth and Graham & Dodd principles in their equity approach.

In fixed income, managers rely on interest rate anticipation and may use deep discount convertibles in addition to normal instruments.

The asset mix Jan. 1 was 85% stocks, 10% bonds and 5% cash.

Roger H. Jenswold and Roger E. King, co-managing partners, are chief investment officers. Mr. King is client contact.

JMB Institutional Realty

875 N. Michigan Ave., Suite 3960, Chicago, Ill. 60611; (312) 440-5000

Total assets managed	$13,400,000,000
Tax-exempt assets managed	$1,500,000,000
Real estate assets managed	$1,500,000,000
Minimum separate account	$100,000,000
Tax-exempt clients	145
Types of accounts managed	CEFG
No. of portfolio managers	6
Size of research staff	35

JMB Institutional Realty Corp. is a real estate manager.

The firm invests in new and existing larger office and retail properties using various investment structures to optimize returns. Intensive property management is emphasized to add value during the holding period.

As of Jan. 1, all of the firm's tax-exempt assets were in equity real estate.

Clients include Pennsylvania, Xerox, Stanford University and the General Board of Pensions of the United Methodist Church.

Neil G. Bluhm, president of JMB Realty Corp., is chief investment officer. John S. Lillard, president, is client contact.

Johnson Investment Counsel Inc.

5556 Cheviot Road, Cincinnati, Ohio 45247; (513) 385-4001

Total assets managed	$247,000,000
Tax-exempt assets managed	$137,000,000
Minimum separate account	$250,000
Tax-exempt clients	82
Types of accounts managed	CEFG
No. of portfolio managers	3
Size of research staff	1

Johnson Investment Counsel Inc. is a balanced manager.

The equity approach is top-down using sector analysis, growth stocks and Graham & Dodd methods.

The fixed-income approach uses sector analysis with selection based on quality, duration and special situations. The firm emphasizes convertible bonds.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

Timothy E. Johnson, president, is chief investment officer. Scott F. Muhlhauser, vice president, is client contact.

Tom Johnson Investment Management Inc.

201 Robert S. Kerr, Suite 517, Oklahoma City, Okla. 73102; (405) 236-2111

Total assets managed	$520,000,000
Tax-exempt assets managed	$512,000,000
Minimum separate account	$400,000
Tax-exempt clients	39
Types of accounts managed	CG
No. of portfolio managers	1
Size of research staff	1

Tom Johnson Investment Management Inc. is an equity, fixed-income and balanced manager.

The equity approach is top-down with a contrarian emphasis and uses low p/e, sector rotation, quantitative analysis and market timing. The firm seeks maximum total return while stressing preservation of capital.

The fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 14.8% stocks, 70% bonds and 15.2% cash.

Clients include Oklahoma Teachers, Idaho Judges' Retirement and Oklahoma Health Care.

Thomas E. Johnson, president, is chief investment officer and client contact.

Johnson, Valliant & Broadfoot Inc.

100 S. Charles St., Suite 1010, Baltimore, Md. 21201; (301) 837-4800

Total assets managed	$212,000,000
Tax-exempt assets managed	$207,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	13
Types of accounts managed	CEFG
No. of portfolio managers	3

Johnson, Valliant & Broadfoot Inc. is an equity manager using emerging growth stocks.

The asset mix Jan. 1 was 93% stocks and 7% cash.

Clients include GTE, Scott Paper, Allied Corp. and Harvard University.

John T. Johnson, Edwin S. Valliant and James W. Broadfoot are chief investment officers.

D. Jones & Co.

50 Sherman Turnpike, Redding, Conn. 06896; (203) 938-3491

Total assets managed	$1,000,000
Tax-exempt assets managed	$1,000,000
Minimum separate account	$250,000
Tax-exempt clients	3
Types of accounts managed	CEF
No. of portfolio managers	1

D. Jones & Co. is an equity, fixed-income and balanced manager.

Its equity approach looks for value and earnings in areas other firms may have neglected. The firm emphasizes large-cap dividend paying companies and concentrates in a few holdings.

In fixed-income, weightings depend on the general environment and interest rate outlook.

The Jan. 1 tax-exempt asset mix

cash.

The firm follows 24 stocks closely and 100, generally.

Douglas Jones is chief investment officer and client contact.

Jones Lang Wootton Realty Advisors

499 Park Ave., New York, N.Y. 10021; (212) 688-8181

Total assets managed	$650,000,000
Tax-exempt assets managed	$650,000,000
Real estate assets managed	$500,000,000
Minimum separate account	$100,000,000
Tax-exempt clients	4
Types of accounts managed	CG

Jones Lang Wootton Realty Advisors is a real estate manager.

The firm employs an opportunistic approach to deal purchasing/convertible debt structuring with a heavy emphasis placed on opportunities. This creates value through in-house property management and development capabilities.

As of Jan. 1, all tax-exempt assets were in equity real estate.

In 1985, the firm realized a $250 million net gain in new tax-exempt business; three clients were added.

Clients include Pennsylvania Public School Employees, U.S. Steel, U S WEST and Pacific Telesis.

John A. Weisz, principal, is chief investment officer and client contact.

Jones, Mathers, Casamento

2 Lakeway Center, Suite 1440, 3850 N. Causeway Blvd., Metairie, La. 70002; (504) 833-1111

Total assets managed	$82,000,000
Tax-exempt assets managed	$57,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	118
Types of accounts managed	C
No. of portfolio managers	3

Jones, Mathers, Casamento & Co. Inc. is an equity and balanced manager.

The equity approach focuses on small- to medium-cap companies with major increases in quarterly earnings.

The active fixed-income approach searches for quality issues at the shorter end of the maturity scale.

Options are used.

The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.

Franklin H. Jones, president, is chief investment officer. Scott M. Harrington, marketing director, is client contact.

Jundt/Capen Associates Inc.

1660 S. Highway 100, Suite 440, Minneapolis, Minn. 55416; (612) 541-0677

Total assets managed	$775,000,000
Tax-exempt assets managed	$775,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	20
Types of accounts managed	CFG
No. of portfolio managers	3

Jundt/Capen Associates Inc. is an equity manager.

The firm's emerging growth portfolios emphasize medium-sized companies with 25% growth rates, while core portfolios emphasize medium to large companies with 15% growth rates.

The asset mix Jan. 1 was 85% stocks and 15% cash.

In 1985, the firm realized a $305 million net gain in new tax-exempt business; six clients were added.

Clients include Dana Corp., Virginia Supplemental Retirement System, W.K. Kellogg Foundation and Southern Co.

James R. Jundt, chairman, is chief investment officer and client contact. Mr. Jundt and Gary T. Capen, president, are client contacts.

K

Kahn Brothers & Co. Inc.

1 Exchange Plaza, 55 Broadway, New York, N.Y. 10006; (212) 269-7450

Total assets managed	$446,000,000

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AMIVEST

Minimum separate account	$500,000
Tax-exempt clients	59
Types of accounts managed	CEFJ
No. of portfolio managers	6
Size of research staff	1

Kahn Brothers & Co. Inc. is a balanced manager.

Its equity approach uses fundamental security analysis in the Graham & Dodd tradition.

For fixed income, managers concentrate on higher-grade credits and frequently invest in less conventional instruments to improve yield.

The asset mix Jan. 1 was 60% stocks, 20% bonds and 20% cash.

Kahn Brothers Investment Corp. is a wholly owned subsidiary.

The University of Texas is a client.

Alan Russell Kahn, president, is chief investment officer. Thomas Graham Kahn, executive vice president, is client contact.

Kangyo Kakumaru Capital Management

1 State Street Plaza, New York, N.Y. 10004; (212) 509-4661

Total assets managed	$150,000,000
Tax-exempt assets managed	$0
Minimum separate account	$1,000,000
No. of portfolio managers	3

Kangyo Kakumaru Capital Management is an equity and international manager set up in March 1983.

Its equity strength lies in the field of emerging and growth stocks. Its fixed-income approach is passive.

Managers follow 500 stocks closely and 1,000, generally. All research is conducted in-house.

The firm is wholly owned by Kangyo Kakumaru Research Institute of Japan.

Etsuo Ogiwara, president, is chief investment officer and client contact.

Kanne, Paris & Hoban Inc.

135 S. LaSalle St., Chicago, Ill. 60603; (312) 372-2255

Total assets managed	$95,000,000
Tax-exempt assets managed	$54,000,000
Minimum separate account	$500,000
Tax-exempt clients	45
Types of accounts managed	CEJ
No. of portfolio managers	3
Size of research staff	2

Kanne, Paris & Hoban Inc. is an equity manager.

For equities, managers use a disciplined, bottom-up approach based on fundamentals to identify undervalued stocks.

Its fixed-income approach is passive, using a five-year ladder.

The Jan. 1 tax-exempt asset mix was 50% stocks, 5% bonds and 45% cash.

Jeffrey E. Kanne, president, is chief investment officer. Ernest J. Dunston, senior vice president, is client contact.

Karsten Institutional Realty Advisors

12121 Wilshire Blvd., Suite 900, Los Angeles, Calif. 90025; (213) 826-0035

Total assets managed	$1,133,000,000
Tax-exempt assets managed	$883,000,000
Real estate assets managed	$779,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	17
Types of accounts managed	CFG

Karsten Institutional Realty Advisors is a real estate manager.

The firm uses equity ownership and equity-oriented mortgages in existing properties, forward commitments and development projects as primary investments.

The asset mix Jan. 1 was 75% equity real estate and 25% mortgages.

Clients include Ohio State Teachers, LTV, Morgan Stanley (as trustee for the Central States Teamsters) and Nevada Public Employees.

The firm's parent is First Interstate Bancorp.

Hugh G. Hilton, senior vice president-director of acquisitions, is chief investment officer. A. Redmond Doms, president of The Karsten Cos., is client contact.

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

KAS Investment Consultants

306 Securities Building, Seattle, Wash. 98101; (206) 622-2565

Total assets managed	$9,000,000
Tax-exempt assets managed	$6,000,000
Real estate assets managed	$100,000
Minimum separate account	$100,000
Tax-exempt clients	8
Types of accounts managed	CF
No. of portfolio managers	2

KAS Investment Consultants is an equity, fixed-income and balanced manager.

The equity approach uses market screens to identify stocks with strong fundamental value. Purchases are timed for emergence from market disenchantment.

In fixed income, interest rate and other value disequilibriums are sought.

The asset mix Jan. 1 was 82% stocks, 10% bonds and 8% cash.

RLW Co. is an affiliate of the firm.

Ronald J. Wells-Henderson is chief investment officer. Richard L. Wilkins is client contact.

William J. Kautz Associates

1205 Franklin Ave., Garden City, N.Y. 11530; (516) 248-9688

Total assets managed	$40,000,000
Tax-exempt assets managed	$40,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	2
Types of accounts managed	GJ
No. of portfolio managers	1
Size of research staff	1

William J. Kautz Associates Inc. is an equity and balanced manager.

The firm prefers companies with low p/es, high returns on equity and assets and those which are underowned, under-researched and have problem-solving managements.

The fixed-income approach stresses interest rate anticipation and sector analysis, swapping between sectors and maturity ranges.

The asset mix Jan. 1 was 67.5% stocks, 30% bonds and 2.5% cash.

William J. Kautz is chief investment officer and client contact.

Kemper Financial Services

120 S. LaSalle St., Chicago, Ill. 60603; (312) 781-1121

Total assets managed	$28,170,000,000
Tax-exempt assets managed	$3,374,000,000
Passive assets managed	$115,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	58
Types of accounts managed	CEFGJ
Size of research staff	18

Kemper Financial Services Inc. is an equity, fixed-income and balanced manager.

The equity approach uses growth stocks, and is based on original research. Stock selection is emphasized, investing in those equities with superior earnings growth potential at valuations that underestimate growth.

In fixed income, intermediate maturities of seven to 12 years are emphasized. The firm seeks to constantly provide incremental returns through sector allocation and issuer selection.

Options are used.

The tax-exempt asset mix Jan. 1 was 65% stocks, 27% bonds and 8% cash.

Clients include Gerber, National Can, Pillsbury and U.S. Gypsum.

The firm is a wholly owned subsidiary of Kemper Group. The firm owns 51% of Kemper-Murray Johnstone International Inc.

Gordon Wilson, senior vice president, is chief investment officer. Timothy H. Kilfoil, vice president, is client contact.

Kemper-Murray Johnstone International Inc.

120 S. LaSalle St., Chicago, Ill. 60603; (312) 845-1880

Total assets managed	$301,000,000
Tax-exempt assets managed	$216,000,000

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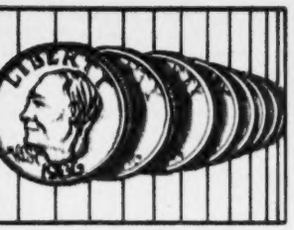

ernational assets managed $216,000,000
imum separate account $5,000,000
-exempt clients 9
es of accounts managed ..... CEFG
of portfolio managers 12
e of research staff 34

Kemper-Murray Johnstone International Inc. is an international equity and ed-income manager.

The equity approach uses international growth stocks and sector rotation. The firm seeks to identify a stock fore the company enters a superior mings growth phase.

The fixed-income approach to international bonds is determined by international interest rate differentials, capital flows and exchange rate pectations.

The asset mix Jan. 1 was 50% cks and 50% bonds.

The firm is 51% owned by Kemper ancial Services Inc.

Michael J. Parlett, executive vice sident and director, is chief investment officer. Gavin B. Dobson, vice sident, is client contact.

empner Capital Management Inc.

O. Box 119, Galveston, Texas 77553; (409) 765-6671

l assets managed $242,000,000
-exempt assets managed $185,000,000
rnational assets managed $7,000,000
imum separate account $5,000,000
es of accounts managed ..... CEFGJ
of portfolio managers 1

Kempner Capital Management Inc. an equity manager using a Graham Dodd investment approach. The ed-income approach is passive.

The asset mix Jan. 1 was 80% cks, 2% bonds and 18% cash.

Clients include MCI Corp., Meadows undation and Port of Galveston.

The firm is affiliated with U.S. tional Bank of Galveston.

Harris L. Kempner Jr. is chief investment officer. Donna Gindrup, vice sident, is client contact.

ennedy Associates Inc.

00 Financial Center, Seattle, Wash. 98161; (206) 624-9640

Total assets managed $2,988,000,000
Tax-exempt assets managed $2,988,000,000
Real estate assets managed $617,000,000
Minimum separate account $5,000,000
Tax-exempt clients 55
Types of accounts managed ..... GJ
No. of portfolio managers 12
Size of research staff 5

Kennedy Associates Inc. is an equity, fixed-income, balanced and real estate manager.

Its equity approach uses technical and fundamental research to capitalize on long-term prospects of stocks. Growth stocks and sector rotation are emphasized. Options are used.

In fixed income, managers emphasize evaluation of interest rates and their relationship to the business cycle and the economic outlook.

For real estate, managers purchase equity positions in general-purpose, multi-tenant commercial properties nationwide. Construction is union built.

The asset mix Jan. 1 was 35% stocks, 40% bonds, 4% cash, 18% real estate and 3% mortgages.

Clients include International Ironworkers, Orange County Retirement and Chicago Carpenters.

Duff Kennedy, president, is chief investment officer. Roger V. Kelly, senior vice president, is client contact.

Kennedy Capital Management

425 N. New Ballas Road, St. Louis, Mo. 63141; (314) 432-0400

Total assets managed $72,000,000
Tax-exempt assets managed $59,000,000
Real estate assets managed $2,000,000
International assets managed $5,000,000
401(k) and 457 assets managed $45,000,000
Minimum separate account $200,000
Tax-exempt clients 61
Types of accounts managed ..... CEFJ
No. of portfolio managers 2
Size of research staff 3

Kennedy Capital Management is an equity manager.

Its approach uses fundamental screens to produce equity selections that are undervalued and gaining a greater relative market share.

The asset mix Jan. 1 was 92% stocks, 3% cash, 3% real estate and 2% convertible preferred stocks.

Clients include Whittaker and Copperweld.

Gerald T. Kennedy, president, is chief investment officer and client contact.

Luther King Capital Management

Suite 401, Burk Burnett, 500 Main St., Fort Worth, Texas 76102; (817) 332-3235

Total assets managed $1,400,000,000
Tax-exempt assets managed $1,000,000,000
Tax-exempt clients 68
Types of accounts managed ..... CEF
No. of portfolio managers 4

Luther King Capital Management is an equity manager emphasizing companies selling at a discount to private market value, with high returns on equity and prudent use of leverage.

In fixed income, it uses interest rate anticipation in purchasing intermediate-term Treasury notes. The firm also tries to exploit market inefficiencies in thinly traded corporate issues.

The Jan. 1 tax-exempt asset mix was 85% stocks, 5% bonds and 10% cash.

Managers follow 100 stocks closely and more than 300, generally; 60% of research is generated internally.

Clients include Kimberly Clark and Gannett.

Luther King, president, is chief investment officer. Emmett M. Murphy, vice president, is client contact.

Kingsley, Jennison, McNulty & Morse Inc.

220 Sansome St., Suite 1100, San Francisco, Calif. 94104; (415) 433-5844

Total assets managed $654,000,000
Tax-exempt assets managed $581,000,000
Real estate assets managed $20,000,000
Minimum separate account $10,000,000
Tax-exempt clients 26
Types of accounts managed ..... CEFG
No. of portfolio managers 7
Size of research staff 3

Kingsley, Jennison, McNulty & Morse Inc. is an equity, fixed-income and balanced manager.

Its active equity approach has a growth stock bias. Companies with accelerating earnings momentum typically account for 80% of a portfolio.

In fixed income, portfolio duration and sector weightings are varied relative to a client's needs. Futures and options hedging strategies are used to manage portfolio volatility.

The asset mix Jan. 1 was 54% stocks, 17% bonds, 26% cash and 3% mortgage-backed securities.

Richard K. Kingsley, chairman and chief executive officer, is chief investment officer. Philip W. Jonckheer, vice president-director of client services, is client contact.

Kirkpatrick, Pettis, Smith, Polian Inc.

1623 Farnam St., Suite 700, Omaha, Neb. 68102; (402) 449-1400

Total assets managed $153,000,000
Tax-exempt assets managed $136,000,000
Minimum separate account $100,000
Tax-exempt clients 69
Types of accounts managed ..... CEFG
No. of portfolio managers 4
Size of research staff 3

Kirkpatrick, Pettis, Smith, Polian Inc. is an equity manager.

The equity approach, somewhat contrarian, is value oriented and uses a Graham & Dodd approach toward less actively followed stocks.

The passive fixed-income approach is defensive, using short maturity, short duration and low-risk methods.

The asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

The firm is owned by Mutual of Omaha.

Randall D. Greer is chief investment officer. Mr. Greer and W. Bruce Remington are client contacts.

Kleinwort Benson International Investment

100 Wall St., New York, N.Y. 10005; (212) 747-0440

Total assets managed $254,000,000
Tax-exempt assets managed $151,000,000
International assets managed $151,000,000
Tax-exempt clients 3
Types of accounts managed ..... CF
No. of portfolio managers 4

Kleinwort Benson International Investment Ltd. is an international manager.

In equities, the firm concentrates on selecting good quality growth stocks, although some cyclical stocks are included from time to time.

In fixed income, great importance is placed on macroeconomic analysis and expectations about interest rates and currency movements.

The asset mix Jan. 1 was 95% stocks and 5% cash.

The firm is a subsidiary of Kleinwort Benson Ltd. with $4.5 billion in total assets.

John F.H. Trott, chairman, is chief investment officer. William Young, director, and Ian Lindsay, vice president, are client contacts.

Knight, Bain, Seath & Holbrook Capital Management Inc.

8 King St. East, Suite 1500, Toronto, Ontario M5C 1B5; (416) 863-1433

Total assets managed ..... $1,134,000,000(U.S.)
Tax-exempt assets managed:
Total $1,134,000,000
For subsidiaries of U.S. firms $209,000,000
International assets managed $352,000,000
Minimum separate account $20,000,000
Tax-exempt clients:
Total 47
U.S. subsidiaries 9
Types of accounts managed ..... CEFU
No. of portfolio managers 4
Size of research staff 2

Knight, Bain, Seath & Holbrook Capital Management Inc., a Canadian firm, is an equity, fixed-income and balanced manager.

For equities, the firm has a growth stock approach and uses Graham and Dodd analysis.

Interest rate anticipation is used for fixed income.

The asset mix Jan. 1 was 38% Canadian stocks, 26% bonds, 7% cash and 29% U.S. stocks.

Clients include Coca-Cola, Procter & Gamble, Dow Chemical and Northern Telecom.

The principals — D. Knight, B. Bain, H. Seath and R. Holbrook — are chief investment officers. Herbert N. Seath is the client contact.

Knowles & Hazlett Ltd.

326 Third Ave., Pittsburgh, Pa. 15222; (412) 391-6707

Total assets managed $23,000,000
Tax-exempt assets managed $3,000,000
Minimum separate account $500,000
Tax-exempt clients 6
Types of accounts managed ..... CEFJ
No. of portfolio managers 1

Knowles & Hazlett Ltd. is a balanced manager.

The equity approach uses growth stocks, Graham & Dodd and quantitative analysis. The fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

Albert P. Knowles is chief investment officer. Bonita Carter Patteson is client contact.

KR Capital Advisors Inc.

450 Park Ave., New York, N.Y. 10022; (212) 888-6300

Total assets managed $605,000,000
Tax-exempt assets managed $578,000,000
401(k) and 457 assets managed $13,000,000
Minimum separate account $20,000,000
Tax-exempt clients 9
Types of accounts managed ..... CFG
No. of portfolio managers 2

KR Capital Advisors Inc. is an equity manager.

Although the firm has a bias toward Graham & Dodd, it takes a more opportunistic approach analyzed from a corporate finance or an entrepreneurial perspective.

The asset mix Jan. 1 was 95.9% stocks and 4.1% cash.

Eighty percent of research is generated internally, with 200 stocks followed closely and 500, generally.

Clients include Baker International, Schlumberger, Keck Foundation and Hughes Aircraft.

Edward D. Klein, chairman, is client contact.

Kreger Capital Management

20180 Governors Highway, Olympia Fields, Ill. 60461; (312) 481-1314

Total assets managed $3,000,000
Tax-exempt assets managed $3,000,000
Minimum separate account $50,000
Tax-exempt clients 10
Types of accounts managed ..... CEF
No. of portfolio managers 1
Size of research staff 1

Kreger Capital Management is an equity and balanced manager.

The equity approach uses growth stocks and market timing. The fixed-income approach uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 60% stocks, 30% bonds, 5% cash and 5% real estate.

Clients include Gerhardt F. Meyne Co. and Chi Psi Educational Trust Fund.

Donald F. Kreger, owner, is chief investment officer and client contact.

KRM Management

400 Montgomery St., Suite 700, San Francisco, Calif. 94104; (415) 434-2850

Total assets managed $52,000,000
Tax-exempt assets managed $31,000,000
Minimum separate account $500,000
Tax-exempt clients 4
Types of accounts managed ..... CEFG
No. of portfolio managers 3
Size of research staff 2

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Vancouver, Canada
(604) 687-7306
Frank Brouwer

KRM Management is a balanced manager using a growth-stock approach for equity investments and interest rate forecasting for fixed-income investments.

Options are used.

The asset mix Jan. 1 was 58% stocks, 31% bonds and 11% cash.

Clients include the Exploratorium, Consolidated Fibres, town of Manchester, Conn. and The Berry Foundation.

Alexander L. Mazour, president, is chief investment officer. William C. Kuehne, chairman, is client contact.

Kronwall Capital Management Inc.

6300 E. El Dorado Plaza, Suite C, Tucson, Ariz. 85715; (602) 886-3130

Total assets managed	$68,000,000
Tax-exempt assets managed	$62,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	8
Types of accounts managed	CEJ
No. of portfolio managers	2

Kronwall Capital Management Inc. is an equity and balanced manager.

The equity approach concentrates on identifying stocks having strong earnings momentum with low relative and absolute p/es.

The fixed-income approach uses interest rate anticipation and concentrates on credit quality. Convertibles may substitute for straight debt.

The asset mix Jan. 1 was 75% stocks, 15% bonds and 10% cash.

Nicholas B. Kronwall, president, is chief investment officer and client contact.

Kurtz Capital Management

P.O. Box 461, Livingston, N.J. 07039; (201) 226-7500

Total assets managed	$128,000,000
Tax-exempt assets managed	$123,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts managed	CJ
No. of portfolio managers	2
Size of research staff	2

Kurtz Capital Management is an equity manager.

Its approach concentrates on seasoned, quality, small- to medium-cap companies with above-average profitability and growth.

Stock-index futures are used.

The asset mix Jan. 1 was 85% stocks and 15% cash.

Clients include Hughes Aircraft, Allied-Signal, Squibb and The Wyatt Co.

Raymond J. Kurtz, president, is chief investment officer and client contact.

I

Laketon Investment Management

P.O. Box 31, Suite 2220, North Tower, Royal Bank Plaza, Toronto, Ontario M5J 2J1; (416) 868-1380

Total assets managed	$525,000,000(U.S.)
Tax-exempt assets managed:	
Total	$450,000,000
For subsidiaries of U.S. firms	$50,000,000
Minimum separate account	$3,000,000
Tax-exempt clients:	
Total	12
U.S. subsidiaries	1
Types of accounts managed	CPU
No. of portfolio managers	6

Laketon Investment Management, a Canadian firm, is an equity, fixed-income and balanced manager.

The firm uses sector rotation in its equity approach and interest rate anticipation in its fixed-income approach.

The asset mix Jan. 1 was 40% Canadian stocks, 45% bonds, 10% cash and 5% U.S. stocks.

Clients include Cominco, Canadian Red Cross, city of Edmonton and Canadian Allied Wholesale & Retail Union.

Alden S. White, managing partner, is chief investment officer and client contact.

Master trust profiles: June 23.

Landauer Advisors Inc.

335 Madison Ave., New York, N.Y. 10017; (212) 687-2323

Total assets managed	$370,000,000
Tax-exempt assets managed	$370,000,000
Real estate assets managed	$370,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	8
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	3

Landauer Advisors Inc. is a real estate manager that acquires property using internally generated, fundamental research and a flexible acquisition policy of broad-ranging investment structures to help identify and maximize undervalued situations. Property is actively managed.

All assets were in equity real estate as of Jan. 1.

Clients include GM, General Tire, Honeywell and Union Carbide.

The firm is a wholly owned subsidiary of Landauer Associates Inc., real estate counselors.

Charles H. Vaughn Jr., senior vice president-acquisitions, is chief investment officer. Client contact is Kenneth Koplow, vice president-investor relations.

Landmark Union Trust Bank

P.O. Box 1388, St. Petersburg, Fla. 33733; (813) 821-1111

Total assets managed	$565,000,000
Tax-exempt assets managed:	
Total	$260,000,000
Commingled accounts	$134,000,000
Separate accounts	$126,000,000
401(k) and 457 assets managed	$6,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	81
Separate	9
Types of accounts managed	CEFG
No. of portfolio managers	4

Landmark Union Trust Bank handles equity and balanced accounts.

The equity approach is defensively oriented, emphasizing stocks with low p/e and high yield with earnings momentum. Managers screen bottom-up from a list of 3,500.

In fixed income, managers look for low volatility, using a three- to 10-year average maturity constraint, following the yield curve.

The tax-exempt asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.

Thirty percent of research is generated in-house, with 75 stocks followed closely and 3,500, generally.

Clients include Times Publishing, St. Anthony's Hospital, city of Pinellas Park and Silor Optical.

Chief investment officer is Vernon B. Gayne Jr., vice president. Client contact is Allen G. Shaffer, vice president.

LaSalle Advisors Inc.

11 S. LaSalle St., Chicago, Ill. 60603; (312) 782-5800

Total assets managed	$2,500,000,000
Tax-exempt assets managed	$1,500,000,000
Real estate assets managed	$1,500,000,000
Minimum separate account	$100,000,000
Tax-exempt clients	48
Types of accounts managed	CFG

LaSalle Advisors Inc., a real estate manager, specializes in major income-producing properties, enabling its investors to realize the benefits of real estate, good returns and offer a stabilizing inflation hedge. Emphasis is on active management of the properties.

All assets were in equity real estate Jan. 1.

The firm netted $500 million in new tax-exempt business in 1985.

Clients include Caterpillar Tractor, Illinois Municipal Fund, Corning Glass and California Public Employees.

Client contact is Stanislaw Maliszewski, senior vice president.

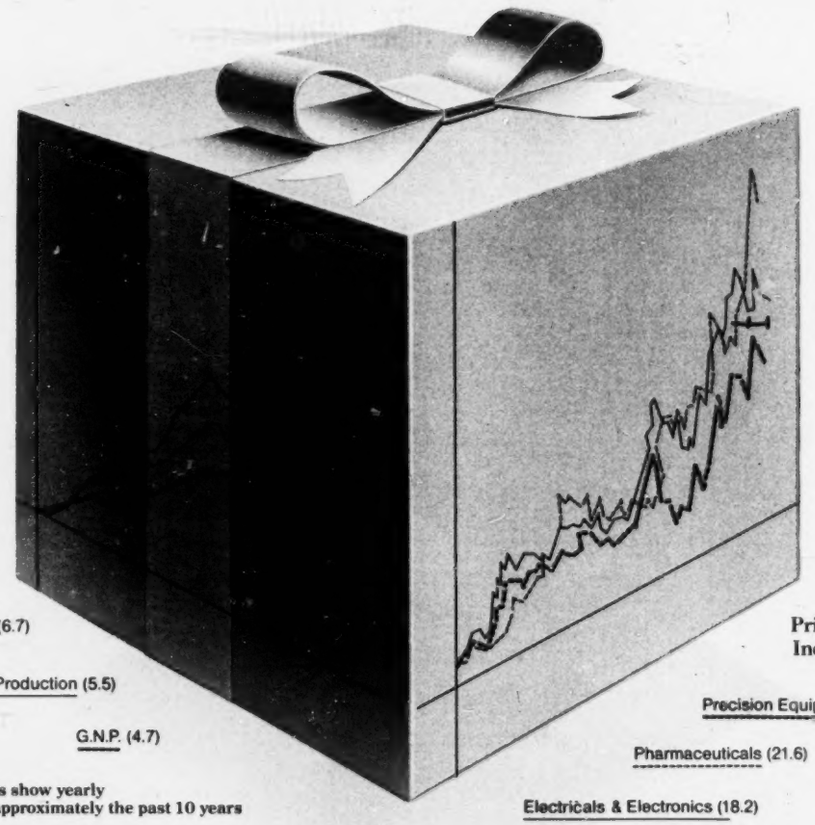
C.J. Lawrence Management

115 Broadway, New York, N.Y. 10006-1602; (212) 306-9485

Total assets managed	$360,000,000
Tax-exempt assets managed	$146,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	29
Types of accounts managed	CEFJ
No. of portfolio managers	6
Size of research staff	24

C.J. Lawrence Management is an equity and balanced manager.

THE JAPAN PACKAGE



Figures in parentheses show yearly growth rates for approximately the past 10 years

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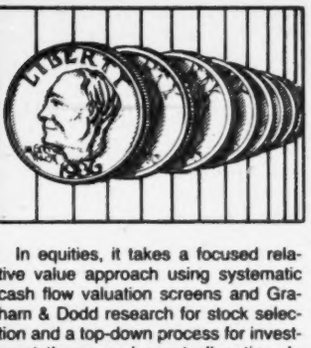

In equities, it takes a focused relative value approach using systematic cash flow valuation screens and Graham & Dodd research for stock selection and a top-down process for investment theme and asset allocation. In fixed income, managers rely on interest rate forecasting.

The asset mix Jan. 1 was 76% stocks, 19% bonds and 5% cash.

The firm netted $22.3 million in new tax-exempt business in 1985. Three clients were added.

The firm is wholly owned by Cyrus J. Lawrence Inc.

E. William Smethurst Jr., managing director, is chief investment officer. Client contact is Robert Q. Wyckoff Jr., managing director.

Lazard Freres Asset Management

1 Rockefeller Plaza, New York, N.Y. 10020; (212) 489-6600

Total assets managed	$5,115,000,000
Tax-exempt assets managed	$4,465,000,000
International assets managed	$25,000,000
Passive assets managed	$15,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	92
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	7

Lazard Freres Asset Management is an equity, fixed-income and balanced manager.

In equities, the firm uses proprietary research to discover and validate stocks where it received more (in high returns on equity and assets) than it paid for.

In fixed income, accounts are managed with a total-return orientation. Valuation techniques are used to restructure portfolio coupon, sector and maturity. Strategy is implemented through the use of risk/reward analysis.

The asset mix Jan. 1 was 73% stocks, 24% bonds and 3% cash.

The firm netted $710 million in new tax-exempt business in 1985; 29 clients were added.

Clients include New York State Electric & Gas, Bakery & Confectionery Unions, New York City Carpenters and General Dynamics.

Three-fourths of the research is generated internally, with 50 stocks followed closely and 150, generally.

Herbert W. Gullquist is chief investment officer. Client contacts are Anthony J. Dote Jr. and Mark W. Hamilton, vice presidents-marketing.

WR Lazard & Co. Inc.

120 Broadway, Suite 1514, New York, N.Y. 10271; (212) 406-5855

Total assets managed	$20,000,000
Tax-exempt assets managed	$20,000,000
Real estate assets managed	$4,000,000
Passive assets managed	$20,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	1
Types of accounts managed	G
No. of portfolio managers	3

WR Lazard & Co. Inc. is primarily a fixed-income and balanced manager.

It manages bond index funds, emphasizing portfolio discipline and flexibility in yield enhancement techniques. Portfolios may be indexed against broad indexes or specific sectors designed to meet client objective.

The asset mix Jan. 1 was 80% bonds and 20% mortgage-backed securities.

Wardell R. Lazard. president, is chief investment officer. Client contact is Edward M. Swan, portfolio manager.

L&B Real Estate Advisors

121 S. Broad St., Philadelphia, Pa. 19107; (215) 985-3921

Total assets managed	$1,300,000,000
Tax-exempt assets managed	$1,300,000,000
Real estate assets managed	$1,300,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	6
Types of accounts managed	G
No. of portfolio managers	7

L&B Real Estate Advisors believes real estate is a long-term investment providing high returns and low portfolio volatility; it makes equity-oriented investments in quality properties.

The asset mix Jan. 1 was 46% equity real estate and 54% mortgages.

The firm netted $300 million in new tax-exempt assets in 1985. Four clients were added.

Clients include the Pennsylvania Public School Employes' Retirement System.

L&B is a wholly owned subsidiary of Fidelcor Inc., a one-bank holding company for Fidelity Bank, which has total assets of $12 billion.

Douglas S. Callantine, senior vice president, is chief investment officer. Client contact is Alan T. Yuhas, director of marketing.

R.M. Leary & Co. Inc.

3300 E. First Ave., No. 380, Denver, Colo. 80206; (303) 320-1063

Total assets managed	$17,000,000
Tax-exempt assets managed	$17,000,000
Minimum separate account	$250,000
Tax-exempt clients	39
Types of accounts managed	CFG
No. of portfolio managers	2

R.M. Leary & Co. Inc. is a balanced manager that bases its equity approach on market timing.

In equities, a bond fund, an anchor money market and an aggressive stock fund are used to take advantage of dependable stock market fluctuations.

In fixed income, money markets within each mutual fund group are used only during bearish markets.

All assets were in mutual fund common stocks Jan. 1.

The firm experienced a $400,000 net gain in new tax-exempt business in 1985. Eight clients were added.

Kate Leary Lee, president, is chief investment officer. Client contact is Brad Place, vice president.

Leavy Investment Management Inc.

6400 Powers Ferry Road, No. 102, Atlanta, Ga. 30339; (404) 951-9314

Total assets managed	$330,000,000
Tax-exempt assets managed	$330,000,000
Passive investments	$59,000,000
Tax-exempt clients	26
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	1

Leavy Investment Management Inc. is an equity, fixed-income and balanced manager.

The equity approach is balanced, seeking to lower risk while maximizing return potential. Willingness to go against the crowd, price sensitivity, high quality and adequate diversification are stressed.

In fixed income, it seeks the best compromise between the reinvestment rate risk (short-term bonds and cash) and risk of market value fluctuation (long bonds). Emphasis is on reaction to rather than prediction of interest rates.

The asset mix Jan. 1 was 22% stocks, 61% bonds and 17% cash.

The firm netted $103 million in new tax-exempt business in 1985. Fourteen clients were added.

John M. Leavy, president and senior investment officer, is chief investment officer. Client contact is Barbara A. Reiser, senior vice president and investment officer.

Legg Mason Capital Management Inc.

7 E. Redwood St., Baltimore, Md. 21203; (301) 539-3400

Total assets managed	$135,000,000
Tax-exempt assets managed	$82,000,000
Minimum separate account	$250,000
Tax-exempt clients	102
Types of accounts managed	CEFJ
No. of portfolio managers	5
Size of research staff	12

Legg Mason Capital Management Inc. is an equity manager whose value orientation emphasizes price to realizable book value, asset structure and liquidity, strong cash flow and out-of-favor situations.

The asset mix Jan. 1 was 83% stocks and 17% cash.

The firm netted $23.3 million in new tax-exempt business in 1985; 43 clients were added.

The firm is a wholly owned subsidiary of Legg Mason Inc.

Chief investment officer is William E. Miller III, vice president. Client contact is Mary Ellen Weissinger, vice president.

Lehman Management Co.

55 Water St., 34th Floor, New York, N.Y. 10041; (212) 668-5408

Total assets managed	$14,570,000,000
Tax-exempt assets managed	$9,459,000,000
Real estate assets managed	$780,000,000
401(k) and 457 assets managed	$20,000,000
Passive assets managed	$1,170,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	145
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	11

Lehman Management Co. Inc. is an equity, fixed-income, balanced and fixed-income indexed manager.

For corporate equity accounts, the emphasis is on historical growth while avoiding high p/e multiples. For Taft-Hartley funds, it takes a contrarian, value oriented total return approach.

In its fixed-income approach, intermediate securities are managed actively based on interest rate forecasts and proprietary quantitative techniques.

The mix of tax-exempt assets Jan. 1 was 29% stocks, 61% bonds (including mortgage-backed securities) and 10% cash.

Clients include Alaska, PBGC, Bricklayers and Trowel Trades International and New York City Employees.

Lehman Management Co. Inc. is affiliated with Shearson Lehman Brothers Inc.

Chief investment officers are C. Charles Hetzel, vice chairman, and Coleman M. Brandt, president.

The client contact for corporate accounts is H. Scott Higgins, executive vice president, and for multiemployer accounts, James J. Manley, executive vice president.

Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs, Suite 340, Dallas, Texas 75201; (214) 855-5600

Total assets managed	$1,500,000,000
Tax-exempt assets managed	$481,000,000
Real estate assets managed	$481,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	22
Types of accounts managed	CG
No. of portfolio managers	3
Size of research staff	465

Lehndorff & Babson Real Estate Counsel invests in scarce properties, usually office or retail, not readily duplicated; properties that are built and leased; and properties with improvement potential.

The asset mix Jan. 1 was 95% equity real estate and 5% mortgages.

The firm netted $252 million in new tax-exempt business in 1985; 11 clients were added.

Clients include Eastman Kodak, United Technologies, Dresser Industries and Clorox.

G. Andrews Smith, president, is chief investment officer. Client contact is Robert M. Angland, executive vice president.

Leland O'Brien Rubinstein Associates Inc.

707 Wilshire Blvd., 13th Floor, Los Angeles, Calif. 90017; (213) 614-3173

Total assets managed	$5,029,000,000
Tax-exempt assets managed	$5,029,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	38
Types of accounts managed	CEFG
No. of portfolio managers	5

Leland O'Brien Rubinstein Associates Inc. specializes in dynamic risk hedging. Stock index and fixed-income futures are used.

The firm netted $2.821 billion in new tax-exempt assets in 1985. Four clients were added.

Clients include Gates, Manville, Mead and PPG Industries.

First Interstate Investment Services, a wholly owned subsidiary of First Interstate Bancorp, owns a minority interest.

Chief investment officer is Larry D. Edwards, president. Client contact is John W. O'Brien, chairman and chief executive officer.

The Leonard Management Group

407 W. Avon Road, Avon, Conn. 06001; (203) 673-3237

Total assets managed	$20,000,000
Tax-exempt assets managed	$2,000,000
Minimum separate account	$250,000
Tax-exempt clients	2
Types of accounts managed	CG
No. of portfolio managers	1

The Leonard Management Group, a balanced manager, stresses low p/e, Graham & Dodd principles and market timing for equities and interest rate anticipation in fixed income.

The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash.

Half of the research is generated in-house, with 50 stocks followed closely and 1,000, generally.

James P. Leonard, president, is chief investment officer and client contact.

Lesesne & Co. Inc.

3414 Peachtree Road N.E., Suite 820, Atlanta, Ga. 30326; (404) 261-8200

Total assets managed	$47,000,000
Tax-exempt assets managed	$45,000,000
Minimum separate account	$250,000
Tax-exempt clients	46
Types of accounts managed	CFJ
No. of portfolio managers	1
Size of research staff	1

Lesesne & Co. Inc. is a balanced manager. It stresses market timing in its equity approach, using three high-quality stock, bond and money market mutual funds. The firm's fixed-income approach is interest rate anticipation.

As of Jan. 1, all tax-exempt assets were in bonds.

The firm recorded a $1 million net gain in new tax-exempt business in 1985; one client was added.

Clients include Atlanta Plumbers Local 72, Rock-Tenn, Coronet Industries and Sheetmetal Workers Local 85.

All research is generated internally.

The chief investment officer is Brannon B. Lesesne Jr., president; client contact is Thomas N. Eddins Jr., executive vice president.

Lexington Management

Park 80 West, Plaza Two, Saddle Brook, N.J. 07662; (201) 845-7300

Total assets managed	$1,517,000,000
Tax-exempt assets managed	$575,000,000
401(k) and 457 assets managed	$13,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	41
Types of accounts managed	CEFGJ
No. of portfolio managers	4

Lexington Management Corp. is an equity, fixed-income and balanced manager.

It uses Graham & Dodd analysis in equities. Seeking to preserve capital and earn a real rate of return, it will not own an equity unless it anticipates earning at least twice the risk-free rate. Options are used.

Using an interest rate anticipation approach to fixed income, it uses duration to manage portfolios; its neutral position is very defensive.

The tax-exempt asset mix Jan. 1 was 66% stocks, 23% bonds, 11% cash.

A $177 million net gain in new tax-exempt business was recorded in 1985; three clients were added.

Seventy-five stocks are followed closely and 200, generally.

Lexington Management Corp. is a wholly owned subsidiary of Piedmont Management Co.

The chief investment officer is William S. Stack; client contact is Joseph Barcic Jr., chief operating officer.

Leylegian Investment Management Inc.

855 Oak Grove Ave., Suite 200, Menlo Park, Calif. 94025; (415) 325-1055

Total assets managed	$180,000,000
Tax-exempt assets managed	$180,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	9
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	2

Leylegian Investment Management Inc. is an equity and balanced manager whose equity approach is low p/e and sector rotation. The firm's fixed-income approach is based on interest rate anticipation.

The mix of tax-exempt assets Jan. 1 was 95% stocks and 5% bonds.

Eighty-five percent of research is generated internally, with 50 stocks followed closely and 150, generally.

The chief investment officer is Jack H. Leylegian II; client contact is Dorothy P. Leylegian.

Liberty Capital Management

11 Broadway, Suite 1066, New York, N.Y. 10004; (212) 509-0550

Total assets managed	$300,000,000
Tax-exempt assets managed	$113,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	21
Types of accounts managed	CFGJ
No. of portfolio managers	3
Size of research staff	2

Liberty Capital Management is a fixed-income manager that relies on active management of U.S. Treasury securities, focusing on price movements, rather than yield spread relationships. The firm uses computerized decision models, rather than relying on interest rate anticipations. Fixed-income futures are used.

As of Jan. 1, all tax-exempt assets were in bonds.

Clients include Coleman, International Brotherhood of Electrical Workers, Beloit Corp. and Cleveland Clinic.

Jonathan Leader, president, is chief investment officer. Client contact is Susan Thompson, marketing coordinator.

Liberty National Bank & Trust Co.

P.O. Box 32500, Louisville, Ky. 40232; (502) 566-2000

Total assets managed	$1,370,000,000
Tax-exempt assets managed:	
Total	$894,000,000
Commingled accounts	$83,000,000
Separate accounts	$811,000,000
Real estate assets managed	$70,000,000
401(k) and 457 assets managed	$22,000,000
Passive assets managed	$10,000,000
Minimum separate account	$100,000
Tax-exempt clients:	
Commingled	150
Separate	400
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	7

Liberty National Bank & Trust Co. handles equity, fixed-income and balanced accounts.

In equities, managers rely on value orientation. Portfolios are well diversified, have low beta, high market liquidity, above-average yield and low p/e. Options are used.

In fixed income, managers take a below-average credit risk. Maturity, diversification and sector patterns are altered to reflect changing risk-reward relationships.

The tax-exempt asset mix Jan. 1 was 55% stocks, 30% bonds, 5% cash and 10% mortgage-backed securities.

Clients include CSX, Capital Holding Corp. and Kentucky Blue Cross & Blue Shield.

Chief investment officer is Robert C. Gray, senior vice president. Client contact is Kennedy H. Clark, senior vice president.

Lieber & Co.

550 Mamaroneck Ave., Harrison, N.Y. 10528; (914) 698-5711

Total assets managed	$1,356,000,000
Tax-exempt assets managed	$556,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	39
Types of accounts managed	CFG
No. of portfolio managers	4
Size of research staff	7

Lieber & Co. is an equity manager using growth stock, emerging growth and low p/e. It concentrates on income and undervalued issues.

The tax-exempt asset mix Jan. 1 was 89.9% stocks, 0.1% bonds, 10%

cash.

A net gain of $41.4 million in new tax-exempt business was recorded in 1985; nine clients were added.

Clients include Texas Instruments, Minnesota and Rogers, Casey & Barksdale.

All research is generated internally, with 420 stocks followed closely and 420, generally.

Lieber is affiliated with Bear, Stearns & Co. Inc.

The chief investment officer is Stephen A. Lieber, senior partner; client contact is Nola M. Falcone, general partner.

Lieberman Cos.

199 Middle Neck Road, Great Neck, N.Y. 11021; (516) 466-6565

Total assets managed	$300,000,000
Tax-exempt assets managed	$120,000,000
Real estate assets managed	$120,000,000
Minimum separate account	$500,000
Tax-exempt clients	10
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	2

Lieberman Cos. is an equity and real estate manager emphasizing current income plus capital appreciation.

The tax-exempt asset mix Jan. 1 was 80% equity real estate and 20% in mortgages.

A $10 million gain in new tax-exempt business was recorded in 1985.

The chief investment officer and client contact is Bruce R. Lieberman, president.

Life Insurance Co. of Georgia

Life of Georgia Corporate Center, P.O. Box 105006, Atlanta, Ga. 30348-5006; (404) 980-5622

Total assets managed	$1,277,000,000
Tax-exempt assets managed:	
Total	$244,000,000
Pooled accounts	$30,000,000
401(k) and 457 assets managed	$20,000,000
GICs	$40,000,000
Annuities	$36,000,000
Other	$138,000,000
Types of accounts managed	CFG
No. of portfolio managers	5
Size of research staff	10

Life Insurance Co. of Georgia offers equity and fixed-income capabilities.

In equities, managers emphasize growth and emerging growth stocks.

Sector analysis is used in the fixed-income approach.

The tax-exempt asset mix Jan. 1 was 60% stocks and 40% bonds.

Clients include Peerless Insurance Co. and Oxford Industries.

Life of Georgia is affiliated with The Investment Centre Inc.

Carroll D. Burns, executive vice president-finance, is chief investment officer. Client contact is Harold Beale, group pension specialist.

Lincoln Capital Management

200 S. Wacker Drive, Chicago, Ill. 60606; (312) 559-2880

Total assets managed	$4,905,000,000
Tax-exempt assets managed	$4,869,000,000
Real estate assets managed	$850,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	52
Types of accounts managed	CEFGJ

Lincoln Capital Management Co. is an equity, fixed-income, and balanced manager.

The firm is a specialty manager emphasizing quality growth stocks as its equity approach.

The firm's fixed-income approach uses interest rate anticipation. Active management is used with an assured minimum return.

The mix of tax-exempt assets Jan. 1 was 33% stocks, 50% bonds and 17% mortgage-backed securities.

A net gain of $25 million in new tax-exempt business was recorded in 1985; three clients were added.

Clients include AT&T, GM, Virginia and Ameritech.

The firm watches 50 stocks closely and 400, generally; 75% of research is generated internally.

Client contact is Parker Hall.

Lincoln National Life Insurance

1300 S. Clinton St., Fort Wayne, Ind.; (219) 427-4767

Total assets managed	$13,172,000,000
Tax-exempt assets managed:	
Total	$4,236,000,000
Pooled accounts	$280,000,000
GICs	$1,017,000,000
Annuities	$329,000,000
Other	$974,000,000
Indexed/dedicated assets	$10,000,000
Minimum separate account	$500,000
Types of accounts managed	CGJ

Lincoln National Life Insurance offers equity, fixed-income, balanced and international capabilities.

The company's two equity managers take different investment approaches, emphasizing market timing and quantitative techniques.

Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 45.7% stocks, 30.7% bonds and 23.6% cash.

A subsidiary, MPT Associates, manages equities for Lincoln National.

The firm is a subsidiary of Lincoln National Corp. and also is affiliated with Lincoln National Investment Management Co. and Lynch & Mayer Inc.

Clients include Beatrice, Whirlpool, Pfizer Chemical and Boise Cascade.

C. David Silletto, executive vice president of Lincoln National Corp., is chief investment officer. Jon Boscia, senior vice president of Lincoln National Corp., is client contact.

Lindner Management Corp.

200 S. Bemiston Ave., St. Louis, Mo. 63105; (314) 727-5305

Total assets managed	$565,000,000
Tax-exempt assets managed	$77,000,000
Minimum separate account	$250,000
Tax-exempt clients	24
Types of accounts managed	CFJ
No. of portfolio managers	3
Size of research staff	1

Taking a low p/e approach in equities, Lindner Management Corp. attempts to buy stocks at prices less than their intrinsic value. In fixed income, it seeks high yield and good quality in comparison with Treasury issues.

The mix of tax-exempt assets Jan. 1 was 65.5% stocks, 2.5% bonds and 32% cash.

A $12 million net gain in new tax-exempt business was recorded in 1985; one client was added.

Seventy-five percent of research is generated internally, with 100 stocks followed closely and 1,000, generally.

The chief investment officer is Kurt J. Lindner, president; client contact is Robert A. Lange, senior vice president.

Lingo Capital Management

3200 W. End Ave. Suite 405, Nashville, Tenn. 37203; (615) 292-9546

Total assets managed	$8,000,000
Tax-exempt assets managed	$200,000
Minimum separate account	$100,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	1

Lingo Capital Management is as equity manager that uses successive, statistical screens of its 2,700-stock data base to select equities that meet its 21 decision criteria. Growth stocks are stressed.

The firm's fixed-income approach i interest rate anticipation; using a sta tistical model, the firm strives to bo invested in fixed-income securities only when interest rates are falling.

The mix of tax-exempt assets Jan. were 65% stocks, 10% bonds, and 25% cash.

Chief investment officer and client contact is Kenneth H. Lingo.

Lipper Analytical Services

5 Carol Road, Westfield, N.J. 07090; (201) 233-8100

Total assets managed	$100,000,00
Tax-exempt assets managed	$94,000,00
International assets managed	$3,000,00
Minimum separate account	$2,000,00
Tax-exempt clients	
Types of accounts managed	CE
No. of portfolio managers	

Lipper Analytical Services Inc invests exclusively in investment com panies. Its equity approach empha sizes broad diversification of invest ment styles within parameters established for each account. Spe

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cialty funds are used to stress particular sectors.

Its fixed-income approach stresses the use of money market instrument funds. On occasion, either high- or low-quality long-term bond funds are used.

The firm is affiliated with Lipper Analytical Securities Corp.

Chief investment officer is A. Michael Lipper, president; client contact is Henry Shilling, director of marketing.

The Lomas & Nettleton Co.

P.O. Box 225644, Dallas, Texas 75265; (214) 761-8296

Total assets managed	$428,000,000
Tax-exempt assets managed	$428,000,000
Real estate assets managed	$428,000,000
Tax-exempt clients	4
Types of accounts managed	G

The Lomas & Nettleton Co. is a real estate manager.

The firm's real estate approach is to provide full real estate investment advisory services for clients. This includes thorough screening and underwriting of proposed investments, as well as a complete asset management function.

Jan. 1, 100% of tax-exempt assets were in mortgages.

It recorded a net gain of $35.6 million in new tax-exempt business in 1985; three clients were added.

Chief investment officer is David A. Ridley, senior vice president; client contact is Richard N. Hoag, second vice president.

Lombard Odier International Portfolio Management Ltd.

Norfolk House, 13 Southampton Place, London, England WCIA 2AJ; (01) 831-2350

Total assets managed	$1,015,000,000
Tax-exempt assets managed	$448,000,000
International assets managed	$188,000,000
Passive assets managed	$65,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	11
Types of accounts managed	CGJ
No. of portfolio managers	7
Size of research staff	20

Lombard Odier International Portfolio Management Ltd. is an equity manager.

It uses a top-down, bottom-up equity approach with active overweighting of conviction markets and growth stocks. The disciplined asset allocation process includes currency hedging. Growth-oriented research groups in London and Geneva, Switzerland, provide input with in-depth corporate research.

The firm has an interest rate anticipation approach to fixed income, selecting individual securities based on market and value analysis.

Options, stock index futures and fixed-income futures are used.

The mix of tax-exempt assets Jan. 1 was 95% stocks and 5% cash.

Lombard Odier International is owned by Lombard Odier & Cie, Geneva, Switzerland.

Clients include American Can, IBM and Lockheed.

Chief investment officer is Robert Van Maasdijk; Frederik S'Jacob is the client contact.

Loomis, Sayles & Co. Inc.

1 Financial Center, Boston, Mass. 02111; (617) 482-2450

Total assets managed	$16,184,000,000
Tax-exempt assets managed	$12,994,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	470
Types of accounts managed	CEFGJ
No. of portfolio managers	52
Size of research staff	45

Loomis, Sayles & Co. Inc. is an equity, fixed-income and balanced manager.

The firm's equity approach is based on sector rotation and flexibility among economic and market sectors. Its fixed-income approach uses credit research to provide incremental gain from medium quality; item selection flexibility enhances interest trend anticipation.

The mix of tax-exempt assets as of Jan. 1 was 44% stocks, 51% bonds and 5% cash.

The firm had a net gain of $611.6 million in new tax-exempt business in 1985; 56 clients were added.

Clients include Federated Department Stores, AT&T, Vermont and National Geographic.

Ninety percent of research is generated internally, with 350 stocks followed closely and 100, generally.

Loomis, Sayles & Co. is a majority-owned affiliate of New England Mutual Life Insurance Co.

Chief investment officer is Robert L. Kemp, president and chief financial officer; client contact is Dugal Thomas, vice president and director of marketing.

Lord, Abbett & Co.

63 Wall St., New York, N.Y. 10005; (212) 425-8720

Total assets managed	$7,115,000,000
Tax-exempt assets managed	$3,147,000,000
401(k) and 457 assets managed	$27,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	28
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	17

Lord, Abbett & Co. is an equity and fixed-income manager.

Its equity holdings are generally characterized by low ratios of price to estimated trendline earnings, dividends, and net asset value relative to corresponding ratios for the S&P 500.

The firm's fixed-income approach focuses on non-traditional management with an emphasis on lower-rated and convertible issues.

The mix of tax-exempt assets Jan. 1 was 89% stock (including convertibles), 2% bonds and 9% cash.

The firm had a net gain in new tax-exempt business of $273 million in 1985; seven clients were added.

Ninety percent of research is generated internally, with 200 stocks followed closely and 350, generally.

Chief investment officer is John M. McCarthy, comanaging partner; client contact is Marilyn Fee White, director of pension marketing.

Lotsoff Capital Management

20 N. Wacker Drive, Suite 3200, Chicago, Ill. 60606; (312) 368-1442

Total assets managed	$206,000,000
Tax-exempt assets managed	$82,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts managed	CG
No. of portfolio managers	3
Size of research staff	3

Lotsoff Capital Management is a fixed-income manager with special expertise in interest rate futures and options.

The Jan. 1 tax-exempt asset mix was 70% bonds and 30% cash.

In 1985, the firm realized a $21.2 million net gain in new tax-exempt business. Three clients were added.

Clients include Northwestern National Life, Federal Express, Scovill and Equifax.

Northwestern National Life is a partner.

Seymour N. Lotsoff, president, is chief investment officer. Mr. Lotsoff and Stephen K. Bossu, vice president, are client contacts.

Loucks, Lee & Associates

No. 770, 602 12th Ave. S.W., Calgary, Alberta T2R 1J3; (403) 269-4871

Total assets managed	$15,000,000(U.S.)
Tax-exempt assets managed	$5,000,000
International assets managed	$1,000,000
Tax-exempt clients	2
Types of accounts managed	CF
No. of portfolio managers	1
Size of research staff	1

Loucks, Lee & Associates Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Equities selected are tailored to the client's objectives and the times. Emphasis is on absolute returns and risk control.

The firm relies on interest rate anticipation in its fixed-income approach, with the focus on long-term trends, risk control and special features.

The asset mix Jan. 1 was 30% Canadian stocks, 40% bonds, 20% cash and 10% U.S. stocks.

Thomas Loucks, president, is chief investment officer and client contact.

Lowe, Brockenbrough, Tierney & Tattersall

415 Mutual Building, Richmond, Va. 23219; (804) 643-9151

Total assets managed	$773,000,000
Tax-exempt assets managed	$585,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	53
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	1

Lowe, Brockenbrough, Tierney & Tattersall is an equity, fixed-income and balanced manager.

The equity approach uses industry concentration to add value and emphasizes stocks with above-average growth and below-average risk.

The fixed-income approach emphasizes sector and maturity selection.

The Jan. 1 tax-exempt asset mix was 40% stocks, 20% bonds, 10% cash and 30% mortgage-backed securities.

In 1985, the firm realized a $258 million net gain in new tax-exempt business. Fifteen clients were added.

Clients include Memphis, Teamsters Joint Council No. 83, Miles Laboratories and Medical College of Virginia.

Thomas Tierney and Fred Tattersall, managing directors, are chief investment officers. Charles C. Field, vice president and director of marketing, is client contact.

m

Macheski/Pappas Asset Management

425 Main St., Ridgefield, Conn. 06877; (203) 431-8860

Total assets managed	$1,000,000
Tax-exempt assets managed	$250,000
Minimum separate account	$100,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	1

Macheski/Pappas Asset Management is a new firm specializing in equity management.

Its approach emphasizes small- to medium-cap stocks and niche companies with good growth patterns and low p/e.

Managers follow about 50 stocks closely and 400, generally; all research is generated internally.

Edward J. Macheski and James P. Pappas, general partners, are chief investment officers and client contacts.

MacKay-Shields Financial

551 Fifth Ave., New York, N.Y. 10176; (212) 210-0400

Total assets managed	$3,283,000,000
Tax-exempt assets managed	$3,107,000,000
Real estate assets managed	$250,000,000
Passive assets managed	$85,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	74
Types of accounts managed	CEFG
No. of portfolio managers	14
Size of research staff	2

MacKay-Shields Financial Corp. is an equity, fixed-income, convertible and balanced manager.

The equity approach concentrates on companies with internal growth rates of 15% to 25% annually. Sector rotation is used.

In fixed income, managers evaluate interest rate risk in a disciplined manner and try to add value through extensive research and sector analysis.

The Jan. 1 tax-exempt asset mix was 44.3% stocks, 35% bonds, 9.1% cash and 11.6% mortgage-backed securities.

Managers follow 200 stocks closely and 1,600, generally; 80% of research is generated internally.

The firm is an independently managed subsidiary of New York Life Insurance Co.

James B. Cowperthwait and Ralph W. Douglas, managing directors, are chief investment officers. William H. Todd, director, and Christina Seix and Christopher Lewis, managing directors, are client contacts.

Magten Asset Management

605 Madison Ave., New York, N.Y. 10022; (212) 759-8911

Total assets managed	$406,000,000
Tax-exempt assets managed	$217,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	10
Types of accounts managed	CEFGJ
No. of portfolio managers	3

Magten Asset Management Corp. is a fixed-income manager investing in diversified portfolios of high-yield securities of issuers in weak financial condition or experiencing poor operating results. These investments include companies with substantial capital needs and negative net worth, which are cyclically depressed or downgraded by the rating services.

The Jan. 1 tax-exempt asset mix was 4% stocks, 93% bonds and 3% cash.

In 1985, the firm realized a $51 million net gain in new tax-exempt business; six clients were added.

Clients include Mid-Jersey Trucking Local 701, Niagara Mohawk Power, Evaluation Associates and Middlebury College.

Talton R. Embry is president and chief investment officer. Barbara Justiz, managing director — new business development, is client contact.

Management Asset Corp.

253 Post Road West, P.O. Box 5006, Westport, Conn. 06881; (203) 226-4768

Total assets managed	$1,064,000,000
Tax-exempt assets managed	$953,000,000
401(k) and 457 assets managed	$12,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	32
Types of accounts managed	CEFGJ
No. of portfolio managers	7

Management Asset Corp. is an equity manager using a bottom-up approach emphasizing companies in sound financial condition with low price relative to historic earnings.

The Jan. 1 tax-exempt asset mix was 65% stocks and 35% cash.

Managers follow about 300 stocks closely and 5,000, generally. All research is conducted in-house.

Clients include Xerox, New York City Teachers, Combustion Engineering and Lincoln Center for the Performing Arts.

Leonard M. Heine Jr., president, is chief investment officer and client contact.

Manning & Napier Advisors

1 East Ave., Rochester, N.Y. 14604; (716) 325-6880

Total assets managed	$1,700,000,000
Tax-exempt assets managed	$1,300,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	5

Manning & Napier Advisors Inc. is an equity, fixed-income and balanced manager.

It takes a fundamental approach to equity valuations based on price/value relationships with the return on U.S. Treasuries as a benchmark. Selections are reviewed continually as macro conditions change.

In fixed income, managers invest in high-quality bonds when the risk of equity ownership is not justified by the yield spread between stocks and bonds. Maturity is determined by the macro outlook and individual clients' income requirements and tolerance for volatility.

The Jan. 1 asset mix was 36% stocks, 56% bonds and 8% cash.

Managers follow 150 stocks closely and 6,000, generally.

William Manning, president, is chief investment officer. William J. Napier, vice president, is client contact.

Manufacturers Hanover Investment Corp.

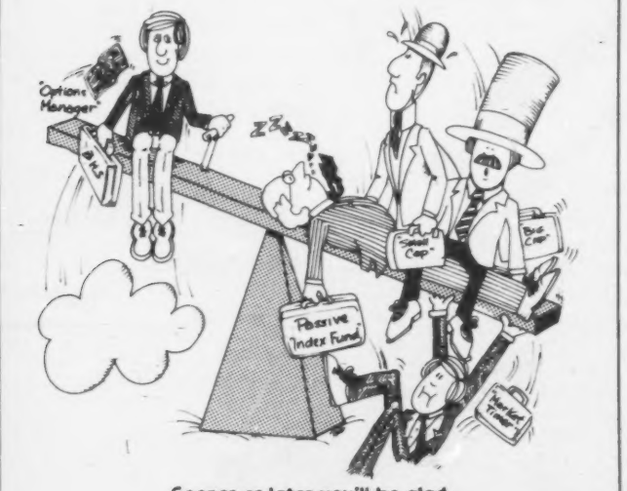
600 Fifth Ave., New York, N.Y. 10020; (212) 957-1752

Total assets managed	$20,084,000,000
Tax-exempt assets managed	$18,383,000,000
Real estate assets managed	$904,000,000
Passive assets managed	$1,810,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	142
Types of accounts managed	CEFGJ
No. of portfolio managers	32
Size of research staff	9

Manufacturers Hanover Investment Corp. is a multiproduct manager with equity, fixed-income, balanced, international, futures, options and venture capital capabilities.

The equity approach is directed toward identifying attractive sectors and industries based on economic and market projections.

The active fixed-income approach



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involves selecting a maturity mix appropriate to the interest rate outlook, yield curve volatility and total return variability.

The Jan. 1 tax-exempt asset mix was 15% stocks, 70% bonds, 9% cash and 6% mortgages.

Managers follow 325 stocks closely and 500, generally; 80% of research is generated internally.

Clients include AT&T, California State Teachers, Illinois Municipal Retirement and NYNEX.

Manufacturers Hanover Investment Corp. is a wholly owned subsidiary of Manufacturers Hanover Trust Co.

Victor J. Melone, president, is chief investment officer. Fred R. Betts, senior vice president, is client contact.

Manufacturers Life Insurance Co.

200 Bloor St. E., Toronto, Ontario M4W 1E5; (416) 926-6903

Total assets managed	$14,051,000,000(U.S.)
Tax-exempt assets managed	$1,902,000,000
Types of accounts managed	CEPU
No. of portfolio managers	9
Size of research staff	2

Manufacturers Life Insurance Co., a Canadian firm, offers equity, fixed-income, money market and guaranteed accounts.

Equity managers take a bottom-up approach to stock selection, with the emphasis on value. The investment objective is to maximize return through capital appreciation, rather than income. Growth stocks are stressed.

In fixed income, the process is one of continuous active management using interest rate anticipation followed by sector analysis.

The tax-exempt asset mix Jan. 1 was 86% stocks, 2% bonds and 12% money markets.

Chief investment officer is Trevor Appleby, vice president-U.S. investments. Client contact is Peter Beca, assistant vice president-pensions.

Manufacturers National Bank of Detroit

100 Renaissance Center, 8th Floor, Detroit, Mich. 48243; (313) 222-9794

Total assets managed	$7,000,000,000
Tax-exempt assets managed:	
Total	$1,258,000,000
Commingled accounts	$318,000,000
Separate accounts	$940,000,000
Real estate assets managed	$9,000,000
401(k) and 457 assets managed	$19,000,000
Passive assets managed	$1,128,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	408
Separate	101
Types of accounts managed	CEPGJ
No. of portfolio managers	5
Size of research staff	8

Manufacturers National Bank of Detroit is an equity, fixed-income, balanced and real estate manager.

In equities, it bases its approach on low p/e and growth stocks. Sector analysis is the basis of its fixed-income approach. Real estate investments are made up of real estate investment trusts and private deals.

Of its $1.128 billion in passive assets, about $570 million was in equity index funds and $558 million in bond index funds.

As of Jan. 1, the tax-exempt asset mix was 45% stocks, 44% bonds, 9.6% cash and 1.4% equity real estate.

Manufacturers National follows 200 stocks closely and generates 60% of research internally.

Clinton B. Schloop, vice president and senior investment officer is chief investment officer. James M. Dawson, investment officer, is client contact.

Marine Investment Management Co.

3 S. Old State Capitol Plaza, Suite 300, Springfield, Ill. 62701; (217) 753-0300

Total assets managed	$796,000,000
Tax-exempt assets managed	$634,000,000
Real estate assets managed	$120,000,000
International assets managed	$4,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	14
Types of accounts managed	CPG
No. of portfolio managers	3
Size of research staff	2

Marine Investment Management Co. is primarily a fixed-income manager.

It takes a Graham & Dodd contrarian approach to equities. Using interest rate anticipation, its fixed-income approach is a Graham & Dodd carryover. Managers analyze the environment to position portfolios for maturity and actively manage assets within a sector to take advantage of abnormalities in the market.

The Jan. 1 tax-exempt asset mix was 5% stocks, 60% bonds, 15% cash, 19% mortgage-backed securities and 1% international.

In 1985, the firm realized a $47 million net gain in new tax-exempt business. Three clients were added.

It is a subsidiary of Marine Corp.

Michael J. Provines, executive vice president and chief investment officer, is client contact.

Marine Trust Co.

111 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 765-2800

Total assets managed	$2,300,000,000
Tax-exempt assets managed:	
Total	$700,000,000
Commingled accounts	$105,000,000
Separate accounts	$595,000,000
Real estate assets managed	$21,000,000
401(k) and 457 assets managed	$54,000,000
Minimum separate account	$250,000
Tax-exempt clients:	
Commingled	475
Separate	1,100
Types of accounts managed	CEFGJ
No. of portfolio managers	13

Marine Trust Co. is an equity, fixed-income and balanced manager with guaranteed investment contract placement capabilities.

In equities, managers emphasize large-cap issues, diversified industry mix and above-market current yield.

The fixed-income approach uses modest interest rate anticipation, laddered intermediate-term maturities and a diversified government/industry mix.

The Jan. 1 tax-exempt asset mix was 50% stocks, 42% bonds, 5% cash and 3% mortgage-backed securities.

Clients include Universal Foods, Briggs & Stratton, Archdiocese of Milwaukee and Blue Cross/Blue Shield.

M. Dale Fritz, senior vice president, is chief investment officer. Jane Arnold, vice president, is client contact.

Marinvest Inc.

250 Park Ave., New York, N.Y. 10177; (212) 503-6815

Total assets managed	$2,656,000,000
Tax-exempt assets managed:	
Total	$976,000,000
Commingled accounts	$569,000,000
Separate accounts	$407,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	260
Separate	21
Types of accounts managed	CFJ
No. of portfolio managers	8
Size of research staff	17

Marinvest Inc. is the newly formed investment management subsidiary of Marine Midland Banks. The firm manages equity, fixed-income and balanced accounts and specializes in cash-equivalent portfolios.

Focusing on low p/e and growth stock, the equity philosophy stresses expected growth with a limited-risk orientation.

The fixed-income approach is active and fundamental using interest rate anticipation and sector analysis. Portfolios maintain an average credit quality of AAA. Sector and individual security swapping is used to increase incremental return.

The Jan. 1 tax-exempt asset mix was 17% stocks, 14% bonds, 67% cash and 2% mortgage-backed securities.

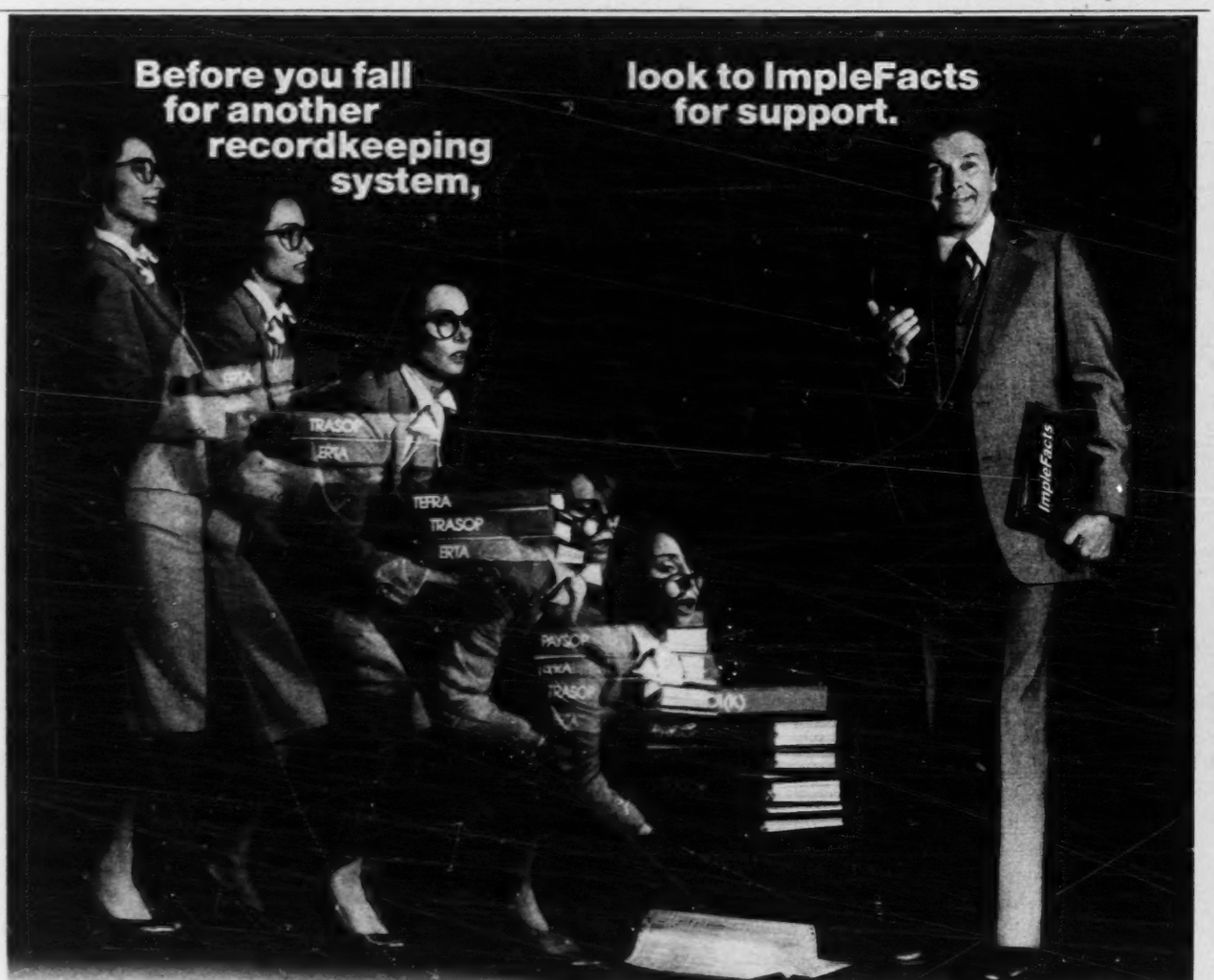
Hiram F. Moody Jr., president, is chief investment officer. Brenda Bocina, client relations manager, is client contact.

Maritime Asset Management

1749-B N.E. 26th St., Fort Lauderdale, Fla. 33305; (305) 563-6827

Total assets managed	$60,000,000
Tax-exempt assets managed	$58,000,000
Real estate assets managed	$4,000,000
International assets managed	$2,000,000
Minimum separate account	$100,000
Tax-exempt clients	4
Types of accounts managed	CJ
No. of portfolio managers	3
Size of research staff	4

Maritime Asset Management Inc. is



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n equity and real estate manager.
The equity approach combines fun-amentals with insider support issue y issue. Market timing is used, as are ptions.
For real estate, it favors publicly aded REITs and some larger limited artnerships that offer equity and mort-age participation.
The Jan. 1 tax-exempt asset mix as 80% stocks, 15% cash, 3% equity al estate and 2% mortgage-backed ecurities.
Barry L. Unterbrink, president, is hief investment officer and client con-ct.

larkston International Inc.

04 Fifth Ave., Sixth Floor, New York, N.Y. 10018; (212) 947-5450

tal assets managed	$269,000,000
x-exempt assets managed	$178,000,000
ternational assets managed	$600,000
nimum separate account	$5,000,000
x-exempt clients	2
pes of accounts managed	C
. of portfolio managers	3

Markston International Inc. is an quity manager, using Graham & Dodd inciples. It invests in REITs when tal returns are attractive, especially hen vacant or below-market-rent operties are present.
The mix of tax-exempt assets Jan. 1 as 88% stocks, 1.4% bonds and .6% cash. It had a net gain of $7.4 illion in new tax-exempt business.
Mutual Benefit Life Insurance is ajority owner of the firm.
Clients are Mutual Benefit Life and PC International.
Chief investment officers are John Stone, president, and Michael J. ullarkey, executive vice president. ient contact is Mr. Stone.

arsh & Cunningham Inc.

O. Box 1961, Boston, Mass. 02105; (617) 482-0290

tal assets managed	$257,000,000
x-exempt assets managed	$36,000,000
nimum separate account	$1,000,000
x-exempt clients	9
pes of accounts managed	CE
. of portfolio managers	2
ze of research staff	1

Marsh & Cunningham Inc. is an quity, balanced and international anager.
Its equity approach stresses broad versification among investment-ade securities having good dividend elds, modest p/e ratios, favorable ice-to-book relationships and liquid arkets. Its fixed-income approach is assive.
The mix of tax-exempt assets Jan. 1 as 65% stocks, 30% bonds and 5% sh.
The firm recorded a net gain of $9 illion in tax-exempt business in 1985; ur clients were added.
Chief investment officer and client ntact is John B. Marsh, president.

laryland National Bank

N. Charles St., P.O. Box 995, Baltimore, Md. 21203; (301) 244-1443

tal assets managed	$955,000,000
x-exempt assets managed:	
Total	$217,000,000
Commingled accounts	$153,000,000
Separate accounts	$64,000,000
nimum separate account	$1,000,000
x-exempt clients	341
pes of accounts managed	CEFGJ
. of portfolio managers	6
ze of research staff	4

Maryland National Bank is an equity, xed-income, balanced and cash man-ger.
Its equity approach uses fundamen-l economic and financial analysis. uality securities, asset allocation, conomic timing, diversification and aluation models are used.
In fixed income, managers use a alanced approach combining interest te forecasting, maturity adjustment, ector and security analysis, arbitrage nd computer simulations.
The Jan. 1 tax-exempt asset mix as 50% stocks, 45% bonds and 5% sh.
Howard M. Weiss, vice president, is hief investment officer. Gordon R. oardway, senior trust officer, is client ntact.

Massachusetts Financial Services Co.

200 Berkeley St., Boston, Mass. 02116; (617) 423-3500

Total assets managed	$10,325,000,000
Tax-exempt assets managed	$2,671,000,000
Real estate assets managed	$225,000,000
International assets managed	$19,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	23
Types of accounts managed	CFG
No. of portfolio managers	20
Size of research staff	15

Massachusetts Financial Services Co. is an equity, fixed-income, balanced and international manager.
The equity approach seeks superior returns by capitalizing on major return differentials between industry groups. The firm rotates sector and industry concentration where relative price momentum and prospective earning potential look the most dynamic.
Its fixed-income approach relies on yield curve and interest rate analyses to determine maturity and sector positions of actively managed, high-quality portfolios.
The tax-exempt asset mix Jan. 1 was 32.8% stocks, 52.2% bonds, 6.6% cash and 8.4% mortgage-backed securities.
It recorded a net loss of $131.1 million in tax-exempt business in 1985; one client was added.
Clients include Alcoa, Los Angeles County and NYNEX.
MFS is a wholly owned subsidiary of Sun Life Assurance Co.
Chief investment officer is Donald F. Pitcher Jr., senior vice president. Client contact is William H. Lynch, vice president.

Massachusetts Mutual Life Insurance Co.

1295 State St., Springfield, Mass. 01111; (413) 788-8411

Total assets managed	$15,579,000,000
Tax-exempt assets managed:	
Total	$6,600,000,000
Pooled accounts	$900,000,000
Separate accounts	$163,000,000
Real estate assets managed	$51,000,000
GICs	$1,791,000,000
Annuities	$760,000,000
Other	$2,771,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	30

Massachusetts Mutual Life Insurance Co. offers equity, fixed-income, balanced and real estate capabilities.
In equities, the insurer seeks companies with superior financial characteristics selling at discounted valuation levels. Low p/es, Graham & Dodd analysis and small-cap stocks are stressed.
In fixed income, quality and maturity are determined by the shape of yield curve in conjunction with yield spread analysis. Interest rate anticipation and sector analysis are used.
In real estate, managers construct a portfolio of quality real estate, well diversified by property type and location. A balance between current income and long-term capital appreciation is emphasized.
The asset mix Jan. 1 was 77.2% stocks, 4.7% bonds, 13.3% cash and 4.8% equity real estate.
The firm sponsors and is investment adviser to Massachusetts Mutual Income Investors Inc., Massachusetts Corporate Investors Inc. and Crestwood Realty.
Clients include Smith Kline Beckman, Harsco and GE.
Richard G. Dooley, executive vice president, is chief investment officer. Client contact is Peter J. Vogian, senior vice president.

MassCo Investment Management Corp.

99 High St., Boston, Mass. 02110; (617) 338-3600

Total assets managed	$380,000,000
Tax-exempt assets managed	$161,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	105
Types of accounts managed	CEFGJ
No. of portfolio managers	10

MassCo Investment Management Corp. is an equity and balanced manager.
Its equity approach is slightly contrarian and combines fundamental, technical and quantitative approaches to create value-oriented portfolios. Active asset allocation uses bonds or cash where income is sought, or improved risk-adjusted returns are expected.
Its fixed-income approach is based on the current level and trend of interest rates, forces affecting credit markets, and yield and quality spread analysis. Quality is limited to investment-grade issues with average maturities of 10 years or less.
The tax-exempt asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.
MassCo is a member of The Keystone Massachusetts Group, a wholly owned subsidiary of The Travelers Insurance Co.
Chief investment officer is George F. Wilkins Jr., senior vice president. Client contacts are Philip M. Byrne, president, and Robert A. Shann, vice president and director of marketing.

Mathers and Co. Inc.

125 S. Wacker Drive, Chicago, Ill. 60606; (312) 236-8215

Total assets managed	$600,000,000
Tax-exempt assets managed	$400,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	10
Types of accounts managed	CEFG
No. of portfolio managers	4

Mathers and Co. Inc. is an equity and balanced manager.
The firm's equity approach is based on fundamental value and special situations, emphasizing individual stock selection. A proprietary valuation model is used.
Its fixed-income approach relies on interest rate anticipation. Investments are restricted to high-quality securities. Portfolio structure is a function of interest rate outlook and, in balanced accounts, a determination of value vs. equities.
The tax-exempt asset mix Jan. 1 was 70% stocks, 10% bonds and 20% cash.
It follows 100 stocks closely and 300 to 500, generally.
Chief investment officer is Henry G. Van der Eb Jr., president; client contact is Daniel P. Abercrombie, vice president.

Matrix Capital Management

Gateway Three, 14th Floor, Newark, N.J. 07102; (201) 877-4900

Total assets managed	$255,000,000
Tax-exempt assets managed	$255,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	2

Matrix Capital Management is an equity and balanced manager.
The equity approach examines macroeconomic variables most likely to influence common stock factor returns.
The Jan. 1 asset mix was 99% stocks and 1% cash.
Ninety percent of the research is generated internally, with 7,000 stocks followed closely and 7,000, generally.
Matrix is affiliated with the Prudential Asset Management Group, which has total assets of $123.2 billion. Of that total, $62.9 billion are tax-exempt.
Michael A. Petrino, managing director, is chief investment officer and client contact.

Mawer & Associates Investment Counsel

Suite 600, 603 7th Ave. S.W., Calgary, Alberta T2P 2T5; (403) 262-4673

Total assets managed	$80,000,000(U.S.)
Tax-exempt assets managed:	
Total	$20,000,000
For subsidiaries of U.S. firms	$8,000,000
International assets managed	$2,000,000
Tax-exempt clients:	
Total	4
U.S. subsidiaries	2
Types of accounts managed	CEF
No. of portfolio managers	3

Mawer & Associates Investment Counsel, a Canadian firm, is a balanced manager.
The firm relies on market timing, Graham & Dodd analysis and low p/e in its equity approach.
In fixed income, its uses interest rate anticipation.
The asset mix Jan. 1 was 20% Canadian stocks, 60% bonds, 10% cash and 10% U.S. stocks.
L.F. Pullen and G.A. Cooper-Key are chief investment officers and client contacts.

McBryan, Malone & Russell

Park Road Plaza, Box 144A R.D. 1, Reading, Pa. 19607; (215) 777-8110

Total assets managed	$75,000,000
Tax-exempt assets managed	$72,000,000
Minimum separate account	$250,000
Tax-exempt clients	120
Types of accounts managed	CEFGJ
No. of portfolio managers	4

McBryan, Malone & Russell Inc. is a balanced manager whose equity approach relies on option hedging.
Seventy percent of assets are invested in large-cap, common stocks with call options sold against them; 20% is in Treasuries with put options sold against them; and 10% is invested in small-cap common stocks. The fixed-income approach is passive.
The mix of tax-exempt assets Jan. 1 was 90% stocks and 10% cash.
The firm netted $8 million in new tax-exempt business in 1985; 10 clients were added.
Chief investment officer is Donald J. McBryan; client contact is M. Kevin Malone.

E.J. McConnell & Associates

Suite 1800, 55 University Ave., Toronto, Ontario M5J 2H7 (416) 366-5871

Total assets managed	$1,140,000,000(U.S.)
Tax-exempt assets managed:	
Total	$850,000,000
For subsidiaries of U.S. firms	$259,000,000
International assets managed	$85,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	47
U.S. subsidiaries	15
Types of accounts managed	CFU
No. of portfolio managers	6

E.J. McConnell & Associates Ltd., a Canadian firm, is an equity and balanced manager.
Its equity approach emphasizes investments in small-capitalization companies with strong balance sheets in which management owns a significant portion of the equity.
It relies on interest rate anticipation in its fixed-income approach, with emphasis on liquidity, safety of capital and reduction in risk. Trading is based on duration adjustments to the portfolio.
The asset mix Jan. 1 was 37% Canadian stocks, 48% bonds, 5% cash and 10% U.S. stocks.
Clients include ITT Canada, American Can Canada, Sperry Canada and Ernst & Whinney.
Edward McConnell, president, is the chief investment officer and client contact.

McCowan Associates Inc.

70 Pine St., New York, N.Y. 10270; (212) 480-8711

Total assets managed	$1,310,000,000
Tax-exempt assets managed	$1,125,000,000
International assets managed	$10,000,000
Passive assets managed	$8,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	32
Types of accounts managed	CEF
No. of portfolio managers	5
Size of research staff	3

McCowan Associates Inc. is an equity and balanced manager.
In its equity approach, it identifies and invests in businesses with prospects for superior sustainable growth and through good timing achieve investment results in excess of that growth on a long-term basis.
The firm seeks to achieve consistent positive returns and limit risk in fixed income. The interest rate forecast determines maturity term structure. Security selection emphasizes high-quality marketability.
The tax-exempt asset mix Jan. 1 was 84% stocks, 6% bonds and 10% cash.
A net loss of $212 million in tax-exempt business was recorded in 1985; two clients were added.
Clients include NYNEX, Pacific Gas & Electric, Kress Foundation and Michigan State University.
Half of the research is generated internally, with 75 stocks followed closely and 200, generally.
Chief investment officer is Bruce J. McCowan, principal and chairman. Client contact is Paul F. Pfeiffer, principal.

McCullough, Andrews & Cappiello Inc.

235 Montgomery, San Francisco, Calif. 94104; (415) 956-8700

Total assets managed	$515,000,000
Tax-exempt assets managed	$385,000,000
International assets managed	$3,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	55
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	2

McCullough, Andrews & Cappiello Inc. is an equity manager.
The firm's equity strategy is based on maintenance of buying power through growth of earnings and dividends on relatively low p/e values purchased on a timely basis at the lower end of their relative trading ranges.
Its fixed-income approach is based on the interest outlook nearer term, with liquidity and quality given top considerations.
The tax-exempt assets mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.
The firm recorded a net gain of $55 million in new tax-exempt business in 1985; five clients were added.
Clients include Oakland Police and Fire, Pacific Stock Exchange and the University of Santa Clara endowment.
Chief investment officer and client contact is Robert F. McCullough, chairman.

McGlinn Capital Management Inc.

850 N. Wyomissing Blvd., Wyomissing, Pa. 19610; (215) 374-5125

Total assets managed	$1,379,000,000
Tax-exempt assets managed	$1,142,000,000
401(k) and 457 assets managed	$5,000,000
Passive assets managed	$500,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	33
Types of accounts managed	CEFGJ
No. of portfolio managers	7

McGlinn Capital Management Inc. is an equity, fixed-income and balanced manager.
The firm's equity approach is based on a top-down approach to identify those industries expected to report the best relative earnings gains. Financial analysis of companies within identified industries adheres closely to Graham & Dodd.
In fixed income, it focuses on the direction of interest rates and the posture of the Federal Reserve Board in selecting a portfolio concentrated in intermediate-term government and high-quality corporate issues.
The tax-exempt assets mix Jan. 1 was 47% stocks and 53% bonds.
The firm recorded a net gain in tax-exempt business in 1985 of $150 million; four clients were added.
Clients include Carpenter Technology, Dairymen, Central Pennsylvania Teamsters and VF Corp.
Twenty-five percent of research is generated internally, with 300 stocks followed closely and 500, generally.
Chief investment officer is Carter R. Winterbottom, executive vice president; client contact is James A. Walker, senior vice president.

C.S. McKee & Co. Inc.

1 Gateway Center, Pittsburgh, Pa. 15222; (412) 566-1234

Total assets managed	$800,000,000
Tax-exempt assets managed	$800,000,000
Tax-exempt clients	60
Types of accounts managed	CEFGJ
No. of portfolio managers	5

C.S. McKee & Co. Inc. is a fixed-income and balanced manager.
Its equity approach is risk-averse and opportunistic, altering the invested position based on quantifiable data. Stocks are selected on a value/earnings basis.

Fixed income is also risk-averse and opportunistic, providing stability of principal and dependable cash flow. Interest rate direction is identified to protect and enhance capital; sector and quality shifts add incremental returns.

The tax-exempt assets mix Jan. 1 was 55% stocks, 40% bonds and 5% cash.

A $63 million net gain of new tax-exempt business was recorded in 1985; eight clients were added.

Clients include Allegheny County, Electric Materials, Buhl Foundation and Pittsburgh.

Chief investment officer is Charles E. Jacobs, chairman; client contact is James H. Hanes, president.

McLean, Budden Ltd.

390 Bay St., Suite 1000, Toronto, Ontario M5H 2Y2; (416) 862-9800

Total assets managed	$1,100,000,000
Tax-exempt assets managed:	
Total	$890,000,000
For subsidiaries of U.S. firms	$71,000,000
Real estate assets managed	$39,000,000
International assets managed	$90,000,000
Minimum separate account	$3,600,000
Tax-exempt clients:	
Total	44
U.S. subsidiaries	5
Types of accounts managed	CEFU
No. of portfolio managers	11

McLean, Budden Ltd., a Canadian firm, is a balanced manager.

Its equity approach is fundamentalist, emphasizing high-quality growth stocks. Selection criteria include earnings growth, stability and return on equity.

Its fixed-income approach is active and uses interest rate anticipation. The firm forecasts yield curve and sector spreads based on business cycle analysis and secular economic trends and monetary policy.

The asset mix Jan. 1 was 42.2% Canadian stocks, 37.7% bonds, 8.4% cash, 1% mortgages and 10.7% U.S. stocks.

R.S.C. Donald is chief investment officer. Wayne D. Beazer is the client contact.

McMillion/Eubanks Capital Management Inc.

P.O. Box 21447, Greensboro, N.C. 27420; (919) 274-4876

Total assets managed	$98,000,000
Tax-exempt assets managed	$54,000,000
401(k) and 457 assets managed	$500,000
Minimum separate account	$1,000,000
Tax-exempt clients	28
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	2

McMillion/Eubanks Capital Management Inc. is an equity and balanced manager.

Its equity approach uses traditional fundamental analysis plus valuation techniques, earnings momentum and technical analysis to isolate relative value. In fixed income, it concentrates on high-quality, underpriced instruments that fit the desired yield curve allocations. Options are used.

The asset mix Jan. 1 was 55% stocks, 30% bonds, 15% cash. The firm had a $6 million net gain in 1985.

Chief investment officer and client contact is P. Lawrence Wingate, senior portfolio manager and director of operations.

McMorgan & Co.

24 California St., San Francisco, Calif. 94111; (415) 956-3336

Total assets managed	$3,000,000,000
Tax-exempt assets managed	$3,000,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	60
Types of accounts managed	J

McMorgan & Co. is a balanced manager.

William O. Sumner, senior vice president, is chief investment officer and client contact.

John McStay Investment Counsel

5949 Sherry Lane, Suite 1560, Dallas, Texas 75225; (214) 750-4932

Total assets managed	$230,000,000
Tax-exempt assets managed	$230,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	11
Types of accounts managed	CFG
No. of portfolio managers	4

John McStay Investment Counsel is an equity manager employing a rotational, theme-oriented approach. Fundamental research is focused on companies with relative p/e momentum, resulting in portfolios with growth characteristics.

Its fixed-income approach provides stability of principal and income to the portfolio. Government securities are used.

The tax-exempt asset mix Jan. 1 was 90% stocks and 10% cash.

Chief investment officer is John McStay, managing partner; client contact is Nancy J. Smith, principal.

Mellon Bank

1 Mellon Bank Center, Room 4020, Pittsburgh, Pa. 15258-0001; (412) 234-1811

Total assets managed	$22,455,000,000
Tax-exempt assets managed:	
Total	$12,238,000,000
Commingled accounts	$317,000,000
Separate accounts	$11,921,000,000
Passive assets managed	$4,621,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	173
Separate	331
Types of accounts managed	CEFG
No. of portfolio managers	23
Size of research staff	9

Mellon Bank is an equity, fixed-income and balanced manager.

The active equity process emphasizes the use of proprietary stock selection methods and the rigorous control of investment risk.

The fixed-income approach emphasizes the exploitation of market inefficiencies in the term structure of interest rates and pricing of individual issues, quality and industry sectors. Risk is rigorously controlled.

The Jan. 1 tax-exempt asset mix was 32% stocks, 57% bonds and 11% cash.

Managers follow 350 stocks closely and 2,000, generally; 25% of research is generated internally.

Clients include General Motors, Lockheed, Alcoa and H.J. Heinz.

Mellon Capital Management, Franklin Portfolio Associates, Mellon Real Estate Investment Management Group and Mellon-Pictet International Ltd. are subsidiaries of the bank.

Donald A. McMullen Jr., executive vice president, is chief investment officer. Maureen V. Clarkson, vice president, is client contact.

Mellon Capital Management

595 Market St., Suite 2900, San Francisco, Calif. 94105; (415) 546-6056

Total assets managed	$8,925,000,000
Tax-exempt assets managed	$8,925,000,000
401(k) and 457 assets managed	$2,000,000
Passive assets managed	$7,400,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	65
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	5

Mellon Capital Management is a passive equity manager.

Core index products provide cost-effective duplication of the equity market. Value-added products, asset allocation and futures strategies are based on proprietary analytics designed to expose transitory capital market imbalances. The firm's fixed-income approach is also passive.

Stock index futures and options are used.

As of Jan. 1, all tax-exempt assets were in stocks.

The firm recorded a net gain of $5.615 billion in new tax-exempt business in 1985; 37 clients were added.

Clients include Burroughs, Delaware, General Mills and Hercules.

Mellon Capital Management is a wholly owned subsidiary of Mellon Bank Corp.

Chief investment officer is William L. Fouse, chairman; client contact is Cary Martin Zellerbach, senior vice president.

Mellon-Pictet International Management Ltd.

Cutlers Gardens, 5 Devonshire Square, London, England EC2M 4LD; (011) 441-283-7471

Total assets managed	$770,000,000
Tax-exempt assets managed	$439,000,000
International assets managed	$439,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	20
Types of accounts managed	CF
No. of portfolio managers	4
Size of research staff	16

Mellon-Pictet International Management Ltd. is an international manager.

Its equity approach is to actively move assets among markets and currencies and concentrate holdings in sectors, industries and individual issues having superior expected return and acceptable risk, based on fundamental research. Options are used.

Their fixed-income approach is to actively move among markets and currencies and along the yield curve in every market based upon extensive research, looking for the highest risk-adjusted rate or return.

All tax-exempt assets were in stocks Jan. 1.

The firm is jointly owned by Mellon Bank N.A. and Pictet & Cie of Geneva, Switzerland.

Chief investment officer is Dan H. Blanks, president. Client contact is Rod Hearn, vice president, at (212) 702-5267.

Mellon Real Estate Investment Management

551 Madison Ave., New York, N.Y. 10022; (212) 702-4040

Total assets managed	$800,000,000
Tax-exempt assets managed	$800,000,000
Real estate assets managed	$800,000,000
Minimum separate account	$10,000
Tax-exempt clients	8
Types of accounts managed	CG

Mellon Real Estate Investment Management Corp. is a real estate manager that invests in equity, debt and hybrid debt structures. It emphasizes current returns in addition to long-term appreciation.

The mix of tax-exempt assets Jan. 1 was 45% equity real estate, 16% mortgages and 39% hybrid debt.

Clients include Westinghouse Electric, Borg-Warner, Detroit Retirement System and Bell Atlantic.

Mellon Real Estate Investment Management Corp. is a wholly owned subsidiary of Mellon Bank Corp.

Chief investment officer is James T. Foran, executive vice president; client contact is Karin E. Shewer, vice president.

L.J. Melody & Co.

1 Riverway, Suite 1850, Houston, Texas 77056; (713) 877-1187

Total assets managed	$1,406,000,000
Tax-exempt assets managed	$362,000,000
Real estate assets managed	362,000,000
Tax-exempt clients	6
Types of accounts managed	CG
No. of portfolio managers	12
Size of research staff	3

L.J. Melody & Co. is a real estate manager that originates and services commercial equity and debt investments. Emphasis is on asset quality and thorough market research.

The mix of tax-exempt assets Jan. 1 was 8% mortgages and 92% participating mortgages.

Clients include CIGNA, Texas Teachers, Provident Life and Phoenix Mutual Life.

Chief investment officer is Lawrence J. Melody, president; client contact is William D. Murphy, senior vice president and treasurer.

Mercantile-Safe Deposit & Trust Co.

2 Hopkins Plaza, Baltimore, Md. 21201; (301) 237-5548

Total assets managed	$4,473,000,000
Tax-exempt assets managed:	
Total	$1,773,000,000
Commingled accounts	$552,000,000
Separate accounts	$1,221,000,000
Types of accounts managed	CEFG
No. of portfolio managers	8
Size of research staff	7

Mercantile-Safe Deposit & Trust Co. is an equity, fixed-income and balanced manager.

Managers are value-oriented equity investors focusing on high-yield, low p/e securities. Emphasis is placed on the buy/sell discipline.

It is a risk-averse, fixed-income manager, using bonds to counterbalance market volatility.

The mix of tax-exempt assets Jan. 1 was 35% stocks, 50% bonds and 15% cash.

Managers follow 200 stocks closely and 3,000, generally; 60% of research is generated internally.

James D. Hardesty, senior vice president, is chief investment officer. John N. Wetzelberger, vice president, is client contact.

Mercantile Trust Co.

P.O. Box 387, St. Louis, Mo. 63166; (314) 425-3896

Total assets managed	$4,860,000,000
Tax-exempt assets managed:	
Total	$2,800,000,000
Commingled accounts	$237,000,000
Separate accounts	$2,563,000,000
Real estate assets managed	$353,000,000
International assets managed	$4,000,000
401(k) and 457 assets managed	$44,000,000
Passive assets managed	$575,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	128
Separate	222
Types of accounts managed	CEFGJ
No. of portfolio managers	11
Size of research staff	11

Mercantile Trust Co. handles equity, fixed-income, balanced and real estate accounts.

In equities, managers use a value orientation approach that stresses fundamental, research-oriented analyses and a definitive valuation process, seeking the best relative stock values in each industry.

The fixed-income approach centers on economic research, credit analysis and interest rate forecasts. The emphasis is on major interest rate cycles, rather than capitalizing on short-term fluctuations.

In real estate, the firm purchases existing quality, income-producing properties diversified by geography, property type and form of ownership.

The asset mix Jan. 1 was 40% stocks, 34% bonds, 13% cash, 2% equity real estate and 11% mortgage-backed securities.

Mercantile Trust follows 300 stocks closely and 2,000, generally; 50% of research is generated internally.

Clients include Southwestern Bell, General Dynamics, Bell Atlantic and National Shopmen.

John H. Blixen II, senior vice president, is chief investment officer. Ralph W. Webster, vice president-institutional services division, is client contact.

Mercator Asset Management

Suite 810, 2400 E. Commercial Blvd., Fort Lauderdale, Fla. 33308; (305) 771-9660

Total assets managed	$75,000,000
Tax-exempt assets managed	$10,000,000
International assets managed	$10,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	1

Mercator Asset Management Inc. is an international equity manager, using low p/e and Graham & Dodd in its approach with an emphasis on stock selection, not country or currency judgments.

All tax-exempt assets Jan. 1 were in stocks.

Mercator is a wholly owned subsidiary of The Prudential Insurance Co.

Chief investment officer is John Thompson, senior managing director; client contact is Michael Williams, managing director.

Merchants Investment Counseling Inc.

1 Merchants Plaza 838E, Indianapolis, Ind. 46204; (317) 267-3731

Total assets managed	$312,000,000
Tax-exempt assets managed:	
Total	$300,000,000
Commingled accounts	$32,000,000
Separate accounts	$268,000,000
Real estate assets managed	$10,000,000
401(k) and 457 assets managed	$500,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	150
Separate	53
Types of accounts managed	CFGJ
No. of portfolio managers	3
Size of research staff	1

Merchants Investment Counseling Inc. is an equity, fixed-income and balanced manager.

In equities, the managers are bottom-up stock pickers using medium-cap companies that have a solid history of accelerated growth in earnings.

The fixed-income approach uses interest rate anticipation and intermediate maturities.

The Jan. 1 tax-exempt asset mix was 40% stocks, 48% bonds and 12% cash.

Clients include Quaker Oats, Northern Indiana Public Service and Indiana Electrical Workers.

The firm is affiliated with Merchants National Bank & Trust Co. of Indiana.

Jack M. Schenck, president, is chief

Knight, Bain, Seath & Holbrook

Capital Management Inc.

Investment Counsel

Canadian and American Pension Funds

8 King Street East, Suite 1500,
Toronto, Canada M5C 1B5
416/863/1433

investment officer. Susan S. Thomas, vice president, is client contact.

Merchants National Bank

701 Wabash Ave., P.O. Box 1447, Terre Haute, Ind. 47808; (812) 234-5571

Total assets managed	$160,000,000
Tax-exempt assets managed:	
Total	$60,000,000
Commingled accounts	$2,000,000
Separate accounts	$58,000,000
Real estate assets managed	$5,000,000
Passive assets managed	$1,000,000
Minimum separate account	$150,000
Tax-exempt clients:	
Commingled	125
Separate	30
Types of accounts managed	CEF
No. of portfolio managers	4

Merchants National Bank is an equity, fixed-income and balanced manager.

The equity approach emphasizes relative and absolute valuation using traditional valuation measures, particularly price/cash flow. Options are used.

The fixed-income approach is semi-passive, with emphasis on the two- to seven-year, high-quality sectors.

The Jan. 1 tax-exempt asset mix was 40% stocks, 45% bonds, 7% cash and 8% mortgage-backed securities.

The bank is a subsidiary of Old National Bancorp.

Peter L. Jacobs, manager-trust investments, is chief investment officer. Jeffrey R. Krieble, senior vice president and trust officer, is client contact.

Merchants National Bank of Muncie

P.O. Box 792, Muncie, Ind. 47305; (317) 747-1572

Total assets managed	$460,000,000
Tax-exempt assets managed:	
Total	$126,000,000
Commingled accounts	$6,000,000
Separate accounts	$120,000,000
Real estate assets managed	$2,000,000
401(k) and 457 assets managed	$500,000
Minimum separate account	$200,000
Tax-exempt clients:	
Commingled	45
Separate	20
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	2

Merchants National Bank of Muncie is an equity, fixed-income and balanced manager.

In equities, the bank takes a top-down approach using a number of valuation techniques to identify solid, fundamentally strong companies that are temporarily out of favor.

The fixed-income approach is semi-passive and uses some sector swapping, focusing on intermediate markets.

The Jan. 1 tax-exempt asset mix was 45% stocks, 45% bonds, 8% cash and 2% equity real estate.

Thomas R. Wagley, vice president and senior investment officer, is chief investment officer. Gerald Bartlett, vice president and employee benefit officer, is client contact.

Merchants National Bank & Trust Co.

1 Merchants Plaza 600E, Indianapolis, Ind. 46255; (317) 267-3731

Total assets managed	$3,552,000,000
Tax-exempt assets managed	$1,089,000,000
Real estate assets managed	$30,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	450
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	3

Merchants National Bank & Trust Co. is a balanced manager. The firm uses mainly growth stocks in its equity approach, adding income stocks according to market conditions.

In fixed income it uses interest rate anticipation, emphasizing high-quality bonds with intermediate maturities.

The tax-exempt asset mix Jan. 1 was 60% stock, 30% bonds and 10% cash.

The firm netted $140 million in new tax-exempt business in 1985; 25 clients were added.

Clients include Eli Lilly and Indianapolis Power & Light.

Seventy-five percent of research is generated internally, with 100 stocks followed closely and 200, generally.

Chief investment officer is Michael Burgad, vice president; client contact is Susan S. Thomas, vice president.

Merganser Capital Management Corp.

575 Technology Square, Cambridge, Mass. 02139; (617) 494-1000

Total assets managed	$560,000,000
Tax-exempt assets managed	$390,000,000
401(k) and 457 assets managed	$190,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	3

Merganser Capital Management Corp. is a fixed-income manager that seeks to consistently earn real returns. It maintains a shorter-than-market duration in portfolios to control interest rate risk and to preserve capital. Incremental returns are generated through investments in sectors/securities that are underpriced for structural reasons.

It uses stock index and fixed-income futures.

The mix of tax-exempt assets Jan. 1 was 6% bonds, 13% cash, 42% mortgage-backed securities and 39% floating-rate securities.

A net gain of $10 million in new tax-exempt business was recorded in 1985.

Merganser is a wholly owned subsidiary of Polaroid Corp.

Polaroid is its client.

Chief investment officer is Edward M. Safran, president; client contact is John Ciarleglio III, vice president.

Meridian Capital Management Ltd.

450 B St., Suite 780, San Diego, Calif. 92101; (619) 239-9048

Total assets managed	$37,000,000
Tax-exempt assets managed	$20,000,000
Tax-exempt clients	24
Types of accounts managed	CFGJ
No. of portfolio managers	2
Size of research staff	1

Meridian Capital Management Ltd. is an equity manager, directing client funds to special situation investments. Options are used. Its fixed-income approach is passive; Treasuries are used.

The mix of tax-exempt assets Jan. 1 was 70% stocks, 20% bonds and 10% cash.

A net gain of $2 million in new tax-exempt business was recorded in 1985; three clients were added.

Clients include Scripps Institute.

Chief investment officer is Ellis C. Smith, president; client contact is John Messner, president.

Meridian Management Co.

1000 Plaza West Building, Little Rock, Ark. 72205; (501) 663-7055

Total assets managed	$372,000,000
Tax-exempt assets managed	$343,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	24
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	2

Equity manager Meridian Management Co. follows Graham & Dodd and is a value manager buying deeply discounted stocks of viable companies.

The mix of tax-exempt assets Jan. 1 was 90% stocks and 10% cash.

A net gain of $48 million in new tax-exempt business was recorded in 1985; six clients were added.

Clients include World Bank, Foxboro, Chesapeake Corp. and Georgia Pacific.

Ninety-five percent of research is generated internally; 100 stocks are followed closely.

Chief investment officer is Lee Bodenhamer, chairman; client contact is Edward C. Hamill, senior vice president.

Merrill Lynch Asset Management Inc.

Box 9011, Princeton, N.J. 08540; (609) 282-2000

Total assets managed	$58,774,000,000
Tax-exempt assets managed	$2,450,000,000
International assets managed	$200,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	382
Types of accounts managed	CEFGJ
No. of portfolio managers	25
Size of research staff	2

Merrill Lynch Asset Management

"One thing really sets me apart from other fund managers."

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"Say I want to hedge my portfolio against a declining market. Protective puts would help to insure my equity positions while also allowing potential for gains should the market swing up. On the other hand, if I want to participate in a rising market with limited risk I'd buy calls in combinations with money market instruments.

"In either case, the versatility of options helps me better manage my fund portfolio."

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Call Beverly Gordon or Michael Green, Institutional Services (212) 943-0600

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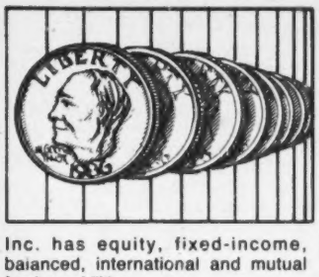


Inc. has equity, fixed-income, balanced, international and mutual fund capabilities.

Taking an overview of general economic and market conditions, the firm seeks issues that can be considered undervalued in the market place and offer an investment value in addition to the prospect of above-average rates of total return.

Its fixed-income approach relies strongly on interest rate anticipation and yield curve analysis, emphasizing preservation of capital, current income, liquidity concerns and control of asset volatility.

The tax-exempt asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

It added 28 clients in 1985; clients include Merrill Lynch and Omaha Police and Firemen.

Half of the research is generated internally, with 200 stocks followed closely and 125, generally.

Merrill Lynch Asset Management is a wholly owned subsidiary of Merrill Lynch & Co.

Chief investment officer is Arthur Zeikel, president; client contacts are Richard L. Reller, vice president, and Bernard J. Durnin, senior vice president.

Paul A. Merriman & Associates

1200 Westlake Ave. N., Suite 507, Seattle, Wash. 98109; (206) 285-8977

Total assets managed	$15,000,000
Tax-exempt assets managed	$11,000,000
Tax-exempt clients	20
Types of accounts managed	CF
No. of portfolio managers	1

Paul A. Merriman & Associates is an equity manager whose approach relies on market timing aggressive to conservative no-load mutual funds on a price-oriented, trend-following basis.

It also market times no-load bond funds on an interest rate, trend-following basis.

The mix of tax-exempt assets Jan. 1 was 90% stocks and 10% bonds.

Paul A. Merriman, president, is chief investment officer and client contact.

Metropolitan Insurance

P.O. Box 160, Royal Bank Plaza, North Tower, Suite 790, Toronto, Ontario M5J 2J4; (416) 865-1151

Total assets managed	$3,203,000,000(U.S.)
Tax-exempt assets managed:	
Total	$638,000,000
For subsidiaries of U.S. firms	$280,000,000
Real estate assets managed	$10,000,000
International assets managed	$9,000,000
Minimum separate account	$2,500,000
Tax-exempt clients:	
Total	12
U.S. subsidiaries	3
Types of accounts managed	CU
No. of portfolio managers	3
Size of research staff	6

Metropolitan Insurance Companies, a Canadian firm, is a balanced manager with specialty managers for each asset class.

The firm relies on growth stock, low p/e, sector rotation, Graham & Dodd principles and market timing in its equity approach.

In fixed-income, the firm relies on interest rate anticipation. Computer-assisted technical analysis augments fundamental analysis in defining turning points in the trend of prices.

In real estate, the firm runs an open-end fund to purchase quality buildings throughout Canada.

The asset mix Jan. 1 was 28% Canadian stocks, 40% bonds, 15% cash, 7% equity real estate and 10% U.S. stocks.

Metropolitan Life of New York is its parent.

Robert L. Silcox, vice president-corporate investments and pension asset management services, is the chief investment officer. William J. Gardner, director-marketing, sales and client relations, is client contact.

Metropolitan Life Insurance

1 Madison Ave., New York, N.Y. 10010; (212) 578-6287

Total assets managed	$76,494,000,000
Tax-exempt assets managed:	
Total	$38,728,000,000
Pooled accounts	$1,850,000,000
Separate accounts	$661,000,000
Real estate assets managed	$430,000,000
GICs	$14,000,000,000
Annuities	$6,500,000,000
Other	$15,717,000,000
Indexed/dedicated assets	$120,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CFG
No. of portfolio managers	23
Size of research staff	95

Metropolitan Life Insurance Co. offers equity, fixed-income, balanced and real estate capabilities.

In equities, it invests primarily in large-cap, high-quality companies that have above-average prospects for long-term earnings and dividend growth.

In fixed income, it uses an interest rate anticipation strategy, enhanced by credit quality and sector analysis, to identify undervalued issues.

The real estate approach is to invest in high-quality, well-located properties with strong income and excellent appreciation potential; create value, added through innovative, professional property management; and diversify properties by type and location.

The asset mix Jan. 1 was 31.2% stocks, 21.2% bonds, 29.9% cash and 17.7% equity real estate.

Metropolitan had $120 million in equity index funds Jan. 1.

Clients include AT&T, American Express, Conoco and Eastman Kodak.

Affiliates include State Street Research and Management Co. and Metropolitan Life Insurance Co. of Canada.

Robert G. Schwartz, chairman of the board, is chief investment officer. Client contact is Harvey M. Young, senior vice president.

MFM Capital Management

1400 N. Semoran Blvd., Suite C, Orlando, Fla. 32807; (305) 282-0700

Total assets managed	$1,000,000
Minimum separate account	$25,000
No. of portfolio managers	2
Size of research staff	2

MFM Capital Management is a balanced and options manager.

The firm invests in quality growth stocks and often seeks to increase yield via options transactions.

Its fixed-income approach calls for adjusting portfolios when interest rate projections could have a profound effect on holdings.

Stock-index futures and fixed-income futures also are used.

Forty percent of research is generated internally, with 15 stocks followed closely and 25, generally.

Chief investment officer and client contact is John A. Maffei Jr., managing director.

Michigan National Investment Corp.

21 E. Long Lake Road, Suite 110, Bloomfield Hills, Mich. 48013; (313) 642-8000

Total assets managed	$1,029,000,000
Tax-exempt assets managed	$422,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$200,000
Tax-exempt clients	105
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	4

Michigan National Investment Corp. is a balanced manager.

In equities, it seeks companies whose future prospects are not fully recognized and that represent excellent value as measured by expected price, earnings or dividend yield.

Its fixed-income approach is based on preservation of principal and achievement of above-average rate of return over normal interest rate cycle by emphasizing intermediate maturities, quality-rated issues in a well diversified portfolio with interest rate anticipation to vary maturities.

The tax-exempt asset mix Jan. 1 was 45% stocks, 50% bonds, 5% cash.

Michigan National Investment Corp. is a wholly owned subsidiary of Michigan National Corp.

Chief investment officer and client contact is Dirk A. Willms, president.

MidAmerica Management

4333 Edgewood Road N.E., Cedar Rapids, Iowa 52499; (800) 553-4287

Total assets managed	$1,500,000,000
Tax-exempt assets managed	$10,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	9
Size of research staff	6

MidAmerica Management Corp. is a fixed-income manager emphasizing economic and market monitoring with immediate portfolio adjustment. The top-down equity approach uses sector rotation.

The Jan. 1 tax-exempt asset mix was 50% stocks and 50% bonds.

Managers follow 100 stocks closely and 300, generally; 10% of research is generated internally.

The firm is a subsidiary of Life Investors Insurance Co.

Edwin L. Ingraham, chairman and president, is chief investment officer. Ronald C. Wright, executive vice president, is client contact.

Midlantic National Bank

Metro Park Plaza, Edison, N.J. 08818; (201) 321-8382

Total assets managed	$3,300,000,000
Tax-exempt assets managed:	
Total	$1,600,000,000
Commingled accounts	$250,000,000
Separate accounts	$1,350,000,000
Real estate assets managed	$350,000,000
401(k) and 457 assets managed	$30,000,000
Passive assets managed	$60,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	385
Separate	55
Types of accounts managed	CEFJ
No. of portfolio managers	18
Size of research staff	3

Midlantic National Bank is an equity, fixed-income and balanced manager offering immunization.

In equities, the bank is value-oriented and tends to be contrarian.

The fixed-income approach stresses high-quality portfolios, using moderate maturity shift with laddered structure and average maturity between five and eight years.

The Jan. 1 tax-exempt asset mix was 31% stocks, 27% bonds, 20% cash and 22% mortgage-backed securities.

Managers follow 50 stocks closely and 300, generally; half of the research is generated internally.

Clients include Foster Wheeler, Hoffman La Roche, Public Service Electric & Gas and American Hoechst.

Charles H. Jones Jr., senior vice president, is chief investment officer. Jeffrey P. Moody, vice president, is client contact.

Midwest Group/Robert H. Leshner & Co. Inc.

700 Dixie Terminal Building, Cincinnati, Ohio 45202; (513) 629-2000

Total assets managed	$20,000,000
Tax-exempt assets managed	$4,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$250,000
Tax-exempt clients	5
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	1

Midwest Group/Robert H. Leshner & Co. Inc. is an equity, fixed-income and balanced manager. Its equity approach emphasizes diversification and selection based on quality, ROE, eps consistency, long-term value and near term potential. In fixed income, it stresses interest rate anticipation. Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 50% stocks, 45% bonds, 5% cash.

Midwest Group is a subsidiary of Leshner Financial Corp.

Chief investment officer and client contact is Linwood Thiessen Jr., vice president.

Milbank Tanaka & Associates Inc.

60 E. 42nd St., Suite 1526, New York, N.Y. 10165; (212) 687-9722

Total assets managed	$44,000,000
Tax-exempt assets managed	$11,000,000
Tax-exempt clients	7
Types of accounts managed	CF
No. of portfolio managers	3

Milbank Tanaka is an equity and balanced manager.

The firm prefers companies with high net cash flow, low p/e, above average eps growth rates and good balance sheets.

Its fixed-income approach uses interest rate anticipation with analysis of cyclical pressures, changing inflation expectations and changes in monetary and fiscal policy.

The tax-exempt asset mix Jan. 1 was 72% stocks, 10% bonds, 18% cash.

Chief investment officers are Jeremiah Milbank III and Graham Y. Tanaka, principals. Client contact is George W. Long, associate.

Miller, Anderson & Sherrerd

2 Bala Plaza, Bala Cynwyd, Pa. 19004; (215) 668-0850

Total assets managed	$8,369,000,000
Tax-exempt assets managed	$8,369,000,000
Real estate assets managed	$2,060,000,000
International assets managed	$86,000,000
401(k) and 457 assets managed	$3,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	77
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	3

Miller, Anderson & Sherrerd is an equity, fixed-income, balanced and quantitative manager.

The firm's equity approach uses low p/e, sector rotation and quantitative analysis. It emphasizes a formalized and disciplined valuation process in making decisions.

The fixed-income approach is interest rate anticipation and sector analysis with intermediate maturity orientation, strategic market timing and sector rotation/opportunism.

The mix of tax-exempt assets Jan. 1 was 47.9% stocks, 26.7% bonds, 24.6% mortgage-backed securities and 0.8% cash.

A net gain of $1.768 billion in new tax-exempt business was recorded in 1985; 19 clients were added.

Clients include Pennsylvania State Employees, J.C. Penney, Johns Hopkins University and Pennwalt Corp.

Seventy-five percent of research is generated internally, with 100 stocks followed closely and 250, generally.

The firm's seven partners are chief investment officers. Client contact is Frederic S. Owen, director of marketing.

MIMLIC Asset Management

400 N. Robert St., St. Paul, Minn. 55101; (612) 298-3826

Total assets managed	$2,640,000,000
Tax-exempt assets managed	340,000,000
401(k) and 457 assets managed	$100,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts	CEG
No. of portfolio managers	5
Size of research staff	3

MIMLIC Asset Management Co. is an equity and fixed-income manager.

Managers purchase stocks that are out of favor with other investors and wait for changing investor perceptions to produce a profit. The equity approach is bottom-up and broadly diversified. It monitors a universe of about 1,400 stocks.

In fixed income, the firm places heavy reliance on credit analysis and identification of value.

The asset mix Jan. 1 was 77% stocks and 23% bonds.

Clients include 3M, University of Minnesota, Research Inc. and Falls Church (Va.) Public Employees.

The parent company is the Minnesota Mutual Life Insurance Co.

Chief investment officer is Alan Notvik, vice president. Client contact is Jeff Winter, director of marketing.

International advisers are profiled in the Aug. 4 issue.

Minton/Newbold's Capital Management

1500 Walnut St., Philadelphia, Pa. 19102; (215) 893-8480

Total assets managed	$540,000,00
Tax-exempt assets managed	$540,000,00
Passive assets managed	$440,000,00
Minimum separate account	$12,000,00
Tax-exempt clients	1
Types of accounts managed	CEG
No. of portfolio managers	

Minton/Newbold's Capital Manage ment is a fixed-income manager offer ing two products: an actively managed cash-matched dedicated technique and an unconstrained approach to consistently compound positive returns.

All tax-exempt assets were in bonds Jan. 1.

Clients include GATX, Illinois Too Works, Libbey-Owens-Ford and Rich mond Supplemental.

Minton/Newbold's Capital is a divi sion of W.H. Newbold's Son & Co Inc., which is a wholly owned subsid iary of Provident Mutual Life Insur ance.

Chief investment officer is Lee W Minton Jr., president. Client contact i Charles H. Hopkins, vice president.

Mitchell Hutchins Asset Management Inc.

1285 Avenue of the Americas, New York 10019; (212) 713-4000

Total assets managed	$10,304 000,00
Tax-exempt assets managed	$762,000,00
International assets managed	$3,000,00
401(k) and 457 assets managed	$15,000,00
Minimum separate account	$5,000,00
Tax-exempt clients	12
Types of accounts managed	CEFG
No. of portfolio managers	1
Size of research staff	

Mitchell Hutchins Asset Manage ment Inc. is an equity and balanced manager.

Its equity approach is earnings growth oriented with a valuation bias The fixed-income approach uses inter est rate anticipation.

The mix of tax-exempt assets Jan. was 70% stocks, 21% bonds and 9% cash.

A $46 million net gain in new tax exempt business was recorded in 1985; seven clients were added.

Clients include Duke University Ford and University of Puerto Rico.

Twenty-five percent of research is generated internally, with 100 stocks followed closely and 200, generally.

Mitchell Hutchins Asset Manage ment Inc. is a wholly owned subsidiary of PaineWebber Inc.

Client contact is Beth Fry.

Montag & Caldwell Inc.

2 Piedmont Center, Suite 500, Atlanta, Ga. 30305; (404) 262-3480

Total assets managed	$508,000,00
Tax-exempt assets managed	$363,000,00
Passive assets managed	$22,000,00
Minimum separate account	$1,000,00
Tax-exempt clients	6
Types of accounts managed	CEFG
No. of portfolio managers	
Size of research staff	

Montag & Caldwell Inc. is an equity fixed-income, and balanced manager.

It uses a bottom-up valuation equity approach that interrelates earnings momentum.

Based on yield curve management the fixed-income approach works to maximize the probability of outper forming the market within an expected range of rate movement by adjusting maturity, coupon and issuer.

The mix of tax-exempt assets Jan. was 66% stocks, 23% bonds and 11% cash.

Sixty percent of research is gen erated internally, with 300 stocks fol lowed closely and 800, generally.

In 1985, active principals purchased 80% of the firm from Alexander & Alexander Services Inc. with an option to purchase the remaining 20%.

Chief investment officer is Ronald E Canakaris, president; client contact is Homer W. Whitman Jr., vice president director of client services.

Montrusco Associates Inc.

1000 Sherbrooke St. W., Suite 2300, Montreal, Quebec H3A 3G4; (514) 842-6464

Total assets managed	$801,000,000(U.S.)
Tax-exempt assets managed	$540,000,000
Real estate assets managed	$22,000,000
International assets managed	$33,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	66
Types of accounts managed	CEFU
No. of portfolio managers	10

Montrusco Associates Inc., a Canadian firm, is an equity, fixed-income, balanced and international manager.

Its equity strategy is based on business cycle analysis and stock selection generated from a multivariable, quantitative approach highlighting expected total return.

The firm uses interest rate anticipation, sector analysis and Canadian issues in foreign currencies in fixed income.

The asset mix Jan. 1 was 36% Canadian stocks, 41% bonds, 9% cash, 4% mortgages, 8% U.S. stocks and 2% international equities.

The firm is affiliated with Montreal Trust, which also holds a controlling interest in MT Associates Investment Counsel Inc.

Andre Marsan, president and chief executive officer, is chief investment officer and client contact.

MONY Financial Services

4 Manhattanville Road, Purchase, N.Y. 10577; (914) 697-8508

Total assets managed	$12,806,000,000
Tax-exempt assets managed:	
Total	$4,803,000,000
Pooled accounts	$1,007,000,000
Real estate assets managed	$72,000,000
401(k) and 457 assets managed	$750,000,000
GICs	$942,000,000
Other	$2,854,000,000
Minimum separate account	$10,000,000
Types of accounts managed	CEFG
No. of portfolio managers	8
Size of research staff	12

MONY Financial Services offers equity, fixed-income, balanced and real estate capabilities.

In equities, managers seek long-term growth of capital through investment in stocks with above-average rates of earnings growth. Managers pursue maximum returns within the parameters of pension fund risk-tolerance.

The fixed-income objective is to provide maximum return over the full interest cycle for both the long-term safety of investment-grade bonds and the liquidity of publicly issued securities.

In real estate, managers pursue a long-term investment philosophy concentrating on direct ownership of income-producing properties. The portfolio is diversified by location and type of property.

The Jan. 1 tax-exempt asset mix was 61% stocks, 21% bonds, 11% cash and 7% equity real estate.

Half the research is generated internally, with 200 stocks followed closely and 350, generally.

Floyd L. Smith, executive vice president, is chief investment officer. Phillip N. Maisano, vice president-pension sales, is client contact.

Morgan Grenfell Investment Services Ltd.

46 New Broad St., London, England EC2M 1JD; (01) 588-4545

Total assets managed	$2,094,000,000
Tax-exempt assets managed	$2,075,000,000
International assets managed	$2,075,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	51
Types of accounts managed	CF
No. of portfolio managers	7
Size of research staff	12

Morgan Grenfell Investment Services Ltd. is an international manager.

Based on growth stock, low p/es and market timing, its equity strategy places equal emphasis on the market decision and stock selection. No investments are made without considering the currency impact.

In fixed income, the firm emphasizes separation of currency and bond market exposure decisions through currency hedging.

The Jan. 1 tax-exempt asset mix was 96% stocks, 3% bonds and 1% cash.

Managers follow 500 stocks closely and 2,500, generally; 60% of research is generated internally.

Clients include Exxon, Rockefeller Foundation, GM and PacTel.

The firm is a wholly owned subsidiary of Morgan Grenfell Holdings.

Michael Bullock, director, is chief investment officer. Elliott M. Gartner, director; Graham D. Bamping, vice president; and Alison J. Ramsdale, vice president, are client contacts.

J.P. Morgan Investment Management Inc.

9 W. 57 St., New York, N.Y. 10019; (212) 826-7816

Total assets managed	$39,843,000,000
Tax-exempt assets managed	$38,866,000,000
Real estate assets managed	$3,177,000,000
International assets managed	$3,176,000,000
Passive assets managed	$5,700,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	369
Types of accounts managed	CEFGJ
No. of portfolio managers	45
Size of research staff	20

J.P. Morgan Investment Management Inc. handles equity, fixed-income, real estate, international, convertibles, immunized, futures and options and petroleum investments.

In equities, the firm believes in a focused, internal, analytical effort combined with disciplined evaluation and portfolio construction principles. Sector rotation is used.

For fixed income, interest rate forecasting is most important. Managers emphasize sector and yield spread analysis.

The Jan. 1 tax-exempt asset mix was 39% stocks, 37% bonds, 2% cash, 4% real estate, 8% mortgages, 5% mortgage-backed securities and 5% international.

Clients include Church Pension Fund, GM, Los Angeles County Employees and Pillsbury.

The firm is a wholly owned subsidiary of J.P. Morgan and Co.

C. Nicholas Potter, president and managing director, is chief investment officer. Martin J. Dowd, vice president, is client contact.

Morgan Stanley Asset Management

1633 Broadway, New York, N.Y. 10019; (212) 703-2658

Total assets managed	$6,983,000,000
Tax-exempt assets managed	$6,031,000,000
Real estate assets managed	$1,952,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	161
Types of accounts managed	CEFGJ
No. of portfolio managers	20
Size of research staff	3

Morgan Stanley Asset Management is an equity, fixed-income, balanced and international manager.

In equities, managers are growth oriented and sector rotational. Portfolios are defensively positioned when growth investing is out of favor.

Bond management focuses on achieving a target rate of return. Investments are concentrated in short- and intermediate-term securities, supplemented with longer-term holdings when it is believed they will enhance returns without significantly increasing risk.

The tax-exempt asset mix Jan. 1

Please ignore our latest investment ranking.

Over the past ten years Indiana Investment Advisors' 11.6% average return on fixed-income investments has ranked us in the top quartile of bond managers in the country.

But we'd rather you notice the consistency of our performance over the years. Then compare our record, achieved by our risk-adverse style, with the record of any other manager.

If you're in the market for a consistently high-ranking fixed-income manager who won't let you down, call Sally J. Phillips, 317-266-6198, and put Indiana Investment Advisors to work for you.

Indiana Investment Advisors
The Indiana National Bank
One Indiana Square, Indianapolis, IN 46266

vas 47% stocks, 16% bonds, 5% cash nd 32% mortgage-backed securities.
Total assets do not include $7.8 illion for which the firm acts in a fiduci- ry/advisory capacity. The majority of he assets are from the Teamsters, Central States, Southeast and South- west Areas Pension Fund.
Barton M. Biggs, chairman, is chief nvestment officer. Client contact is W. Jenman Zirkle, marketing director.

Morison Asset Management

201 Marquette Ave., Minneapolis, Minn. 55403; (612) 332-1588

otal assets managed	$170,000,000
ax-exempt assets managed	$151,000,000
inimum separate account	$300,000
ax-exempt clients	110
ypes of accounts managed	CFG
o. of portfolio managers	6

Morison Asset Management Inc. is n equity manager emphasizing rowth stock and emerging growth ecurities. Options are used.
Its fixed-income approach is based n interest rate anticipation.
The Jan. 1 tax-exempt asset mix as 50% stocks, 40% bonds and 10% ash.
The firm follows 70 stocks closely nd 180, generally; all research is con- ucted in-house.
David L. Printy, president, is chief nvestment officer. Ronald R. Halver- on, vice president, is client contact.

Morley Capital Management

000 Kruse Way Place, Suite 2-300, Lake Oswego, Ore. 97034; (503) 635-5414

otal assets managed	$515,000,000
ax-exempt assets managed	$515,000,000
01(k) and 457 assets managed	$75,000,000
inimum separate account	$10,000,000
ax-exempt clients	28
ypes of accounts managed	CFGJ
o. of portfolio managers	4
ize of research staff	1

Morley Capital Management Inc. is a xed-income manager emphasizing table, foundation portfolio planning sing GICs.
The Jan. 1 tax-exempt asset mix as 95% GICs and 5% cash.
Clients include International Brother- ood of Teamsters of D.C., Bush oundation, Commerce Clearing ouse and Southern California Edison.
Harold H. Morley is chief investment officer. Larry H. Mylnechuk, senior vice president, is client contact.

Mortgage Investors Group

1645 Palm Beach Lakes Blvd., Suite 240, West Palm Beach, Fla. 33401; (305) 686-1800

Total assets managed	$204,000,000
Tax-exempt assets managed	$202,000,000
Real estate assets managed	$202,000,000
Tax-exempt clients	4
Types of accounts	G
No. of portfolio managers	3
Size of research staff	2

Mortgage Investors Group Inc. and its subsidiary, Mortgage Investors Advisory Group Inc., are real estate advisers that invest in conservative, growth-oriented real estate.
The firms emphasize conservative, well-underwritten participating debt and short-term real estate lending against government takeouts.
The asset mix Jan. 1 was 22% equity real estate and 78% mortgages.
Clients include Detroit Policemen & Firemen, Detroit General Retirement, Wayne County Employees and Oakland County Employees.
Edwin B. Wayman, president, is chief investment officer and client contact.

Mt. Auburn Management

79 Milk St., Boston, Mass. 02109; (617) 423-7707

Total assets managed	$18,000,000
Tax-exempt assets managed	$12,000,000
Minimum separate account	$2,500,000
Tax-exempt clients	2
Types of accounts managed	EF
No. of portfolio managers	1

Mt. Auburn Management is an equity manager combining growth stock, emerging growth and sector rotation strategies. Portfolios are highly concentrated and focus on change and earnings acceleration.
The Jan. 1 tax-exempt asset mix was 93% stocks and 7% cash.
The firm follows 25 stocks closely and 100, generally; half the research is generated in-house.
Taconic Foundation is one of the firm's clients.
Alan J. Dworsky, principal, is chief investment officer and client contact.

MPT Associates

630 Fifth Ave., New York, N.Y. 10111; (212) 247-5858

Total assets managed	$800,000,000
Tax-exempt assets managed	$800,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	3

MPT Associates is an equity and balanced manager.
In equities, managers use a quantitative approach to evaluate growth and fundamental features of stocks. Client portfolios have diversification and risk/reward characteristics according to their specifications.
The fixed-income approach uses sector analysis and is quantitatively controlled.
Options and stock index futures are used.
The Jan. 1 tax-exempt asset mix was 99% stocks and 1% cash.
Managers follow 300 stocks closely and 1,000, generally; 25% of research is generated internally.
Clients include Northern Illinois Gas, American Chemical Society, Dow Corning and World Bank.
The parent company is Lincoln National Corp.
David A. Baker, president, is chief investment officer. F. Allen Dudley, vice president, is client contact.

MRealty

P.O. Box 225415, Dallas, Texas 75265; (214) 698-4528

Total assets managed	$25,000,000
Tax-exempt assets managed:	
Total	$20,000,000
Commingled accounts	$20,000,000
Real estate assets managed	$20,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	13
Types of accounts managed	CFJ
No. of portfolio managers	2
Size of research staff	4

MRealty is the real estate management subsidiary of MCorp.
Managers invest in properties with good location, quality design and construction, above-average current return and potential for substantial appreciation.
The Jan. 1 tax-exempt asset mix was 80% equity real estate and 20% mortgages.
Frank Tilley, president, is chief investment officer. Mark J. Dunbar, vice president and director of marketing, is client contact.

MSecurities Corp.

P.O. Box 225415, Dallas, Texas 75265; (214) 698-5864

Total assets managed	$1,030,000,000
Tax-exempt assets managed:	
Total	$695,000,000
Commingled accounts	$446,000,000
Separate accounts	$249,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	7
Separate	22
Types of accounts managed	CEFG
No. of portfolio managers	7

MSecurities Corp. is an equity, fixed-income and balanced manager.
In equities, it emphasizes rotational growth. Graham & Dodd approach is available through a branch office.
The top-down, fixed-income style emphasizes research on financial statistics to establish interest rates.
The Jan. 1 tax-exempt asset mix was 44% stocks, 24% bonds and 32% cash.
Managers follow 100 stocks closely and 250, generally; 80% of research is generated internally.
Clients include LTV, Lomas & Nettleton, Fort Worth and Trinity University.
The firm is a wholly owned subsidiary of MCorp.
Hilton Hamphill, president, is chief investment officer. Lyle E. Brumley, vice president of marketing, is client contact.

Mu-Cana Investment Counselling Ltd.

227 King St. South, Waterloo, Ontario N2J 4C5; (519) 888-2750

Total assets managed	$1,504,000,000(U.S.)
Tax-exempt assets managed:	
Total	$1,225,000,000
For subsidiaries of U.S. firms	$185,000,000
Real estate assets managed	$7,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	65
U.S. subsidiaries	13
Types of accounts managed	CEFU
No. of portfolio managers	9
Size of research staff	1

Mu-Cana Investment Counselling Ltd., a Canadian firm, is a balanced manager.
The firm relies on Graham & Dodd analysis in its equity approach and on interest rate anticipation in its fixed-income approach.
The asset mix Jan. 1 was 35% Canadian stocks, 55% bonds and 10% U.S. stocks.
Clients include Gates Canada, Joy Manufacturing, General Foods and Pillsbury Canada.
Mutual Life of Canada is the firm's parent company.
H.E. Brough, president, is the chief investment officer. David M. Paleczny, senior vice president-marketing and administration, is the client contact.

Muhlenkamp and Co. Inc.

Enterprise Building, 12300 Perry Highway, Wexford, Pa. 15090; (412) 935-5520

Total assets managed	$29,000,000
Tax-exempt assets managed	$11,000,000
Minimum separate account	$200,000
Tax-exempt clients	16
Types of accounts managed	CEFGJ
No. of portfolio managers	1
Size of research staff	2

Muhlenkamp and Co. Inc. is an equity manager using a Graham & Dodd approach and a value-oriented screening process.
Bonds are treated as an alternative investment when they meet the criteria of the screening process. Treasury bills or money market funds are used.
The Jan. 1 tax-exempt asset mix was 75% stocks, 20% bonds and 5% cash.
Ronald H. Muhlenkamp, president, is chief investment officer; H. Anthony Hodges, vice president, is client contact.

Mutual of America Life Insurance Co.

666 Fifth Ave. New York, N.Y. 10103; (212) 399-1600

Total assets managed	$2,585,000,000
Tax-exempt assets managed:	
Total	$2,585,000,000
Pooled accounts	$516,000,000
401(k) and 457 assets managed	$580,000
GICs	$11,000,000
Other	$2,575,000,000
Tax-exempt clients	12,000
No. of portfolio managers	7
Size of research staff	1

Mutual of America Life Insurance Co. is an equity, fixed-income and balanced manager.
Its growth stock approach pursues companies with above-average earnings prospects.
Interest rate anticipation and sector analysis are used for fixed income. The company uses relatively active management to take advantage of changing opportunities in market relationships.
The mix of tax-exempt assets Jan. 1 was 87.7% stocks, 11.65% bonds, 0.21% cash and 0.44% other.
Half of the research is generated internally, with 150 stocks followed closely and 300, generally.
Chief investment officer is Joan M. Casson, senior vice president. Client contact is Howard Lichtenstein, senior vice president-consulting services.

Mutual Benefit Life

520 Broad St., Newark, N.J. 07101; (201) 481-8669

Total assets managed	$5,398,000,000
Tax-exempt assets managed:	
Total	$5,398,000,000
Pooled accounts	$149,000,000
Separate accounts	$52,000,000
GICs	$1,176,000,000
Annuities	$121,000,000
Other	$3,680,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CEGJ
No. of portfolio managers	3
Size of research staff	4

Mutual Benefit Life is an equity, fixed-income, balanced and real estate manager.
The equity approach emphasizes fundamentals and value, using Graham & Dodd analysis.
In fixed income, managers seek maximum returns from the sectors offering the highest current yields, subject to credit-quality standards and portfolio-matching strategies.
The asset mix Jan. 1 was 60.8% stocks, 0.8% bonds, 9% short-term and cash, 7.9% equity real estate and 21.5% mortgages.
Clients include Bethlehem Steel, GTE, Texaco and Sperry.
The firm is affiliated with Markston International, MUBEN Realty and MBL Investment Advisory Corp.
Chief investment officer is Ted D. Simmons, senior executive vice president. Client contact is Robert Davidow, senior vice president-pensions.

n

Narragansett Capital Corp.

40 Westminster St., Providence, R.I. 02903; (401) 751-1000

Total assets managed	$200,000,000
Tax-exempt assets managed	$47,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	20
Types of accounts managed	CEFG
No. of portfolio managers	2

Narragansett Capital Corp. specializes exclusively in equity and debt investments in leveraged buy-outs.
Clients include Honeywell, United Technologies, Ford Foundation and Case Western Reserve.
Arthur D. Little is chief investment officer and client contact.

National Bank of Detroit

611 Woodward, Detroit, Mich. 48226; (313) 225-2183

Total assets managed	$8,190,000,000
Tax-exempt assets managed:	
Total	$5,703,000,000
Commingled accounts	$3,316,000,000
Separate accounts	$2,387,000,000
Passive assets managed	$637,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	2,078
Separate	108
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	20

National Bank of Detroit is an equity, fixed-income and balanced manager with capabilities in guaranteed investment contracts.
In equities, the firm uses a value-oriented approach. The fixed-income approach uses interest rate anticipation and sector analysis with emphasis on high marketability and an appropriate maturity schedule.
As of Jan. 1, the bank had $87 million in equity index funds and $550 million in dedicated or immunized portfolios for tax-exempt clients.
Managers follow 150 stocks closely and 500, generally; 80% of research is generated internally.
Clients include DeLuxe Check Printers, Chrysler, Detroit Edison and Rockwell International.
James M. Lane, senior vice president, is chief investment officer. John Karl Broman, trust officer, is client contact.

The National Bank of Washington

4340 Connecticut Ave. N.W., Washington, D.C. 20008; (202) 364-6976

Total assets managed	$836,000,000
Tax-exempt assets managed:	
Total	$836,000,000
Commingled accounts	$300,000,000
Separate accounts	$536,000,000
Real estate assets managed	$186,000,000
401(k) and 457 assets managed	$26,000,000
Passive assets managed	$45,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	85
Separate	170
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	6

The National Bank of Washington is an equity, fixed-income, balanced and

BABSON
FIXED INCOME
ADVISORS,
Inc.

David L. Lindsay
President

An affiliate of
David L. Babson & Co., Inc.
Boston, Massachusetts

real estate manager that offers short-term money market and indexed capabilities.

The equity approach uses low p/e and Graham & Dodd methods emphasizing consistency of returns with risk-averse posture.

In fixed income, the bank takes either an opportunistic approach with aggressive management or a pure bond index, depending on client need.

Options, stock index futures and fixed-income futures are used.

In real estate, it uses diversified equity portfolios designed to maximize returns through forward funding.

Of the passive investments, $5 million each was in bond and equity index funds and $35 million was in dedicated or immunized portfolios.

The Jan. 1 tax-exempt asset mix was 15% stocks, 15% bonds, 48% cash, 9% equity real estate and 13% mortgages.

Walter J. Haas, vice president, is chief investment officer and client contact. Mr. Haas and Richard Swift, senior vice president, are client contacts.

National City Bank Cleveland

1900 E. Ninth St., Cleveland, Ohio 44114; (216) 575-2581

Total assets managed	$5,900,000,000
Tax-exempt assets managed:	
Total	$2,800,000,000
Commingled accounts	$635,000,000
Separate accounts	$2,165,000,000
Passive assets managed	$50,000,000
Minimum separate account	$2,000,000
Tax-exempt clients:	
Commingled	1,285
Separate	65
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	8

National City Bank Cleveland is an equity, fixed-income and balanced manager.

In equities, consistent growth stocks are sought at reasonable prices with medium-cap issues preferred.

The fixed-income approach uses interest rate anticipation and sector analysis; low-quality issues are avoided.

The Jan. 1 tax-exempt asset mix was 60% stocks and 40% bonds.

Managers follow 135 stocks closely and 210, generally; 50% of research is generated internally.

Clients include Goodyear, LTV, Harris and Roadway Express.

J. Warren Hall, senior vice president, is chief investment officer and client contact.

National Investment Services of America

815 E. Mason St., Suite 1501, Milwaukee, Wis. 53202; (414) 271-6540

Total assets managed	$4,160,000,000
Tax-exempt assets managed	$4,000,000,000
Passive assets managed	$3,750,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	23
Types of accounts managed	CEFGJ
No. of portfolio managers	8

National Investment Services of America is an equity, fixed-income and balanced manager.

Its equity approach focuses on earnings momentum. Growth and emerging growth stocks are used.

In fixed income, managers aggressively seek to add value while controlling interest rate risk and sector exposure.

The asset mix Jan. 1 was 5% stocks, 90% bonds and 5% cash.

The firm had $3.75 billion in dedicated or immunized bond funds as of Jan. 1.

In 1985, the firm realized a $808 million net gain in new tax-exempt business. Six clients were added.

Clients include Ameritech, U S WEST, Interlake and Eastern Airlines Pilots.

Joseph E. Gorman, president, and Eugene G. Martin, executive vice president-equities, are chief investment officers. Thomas R. Tuschen, vice president, is client contact.

National Trust Co.

21 King St. East, Toronto, Ontario M5C 1B3; (416) 361-3611

Total assets managed	$13,500,000,000(U.S.)
Tax-exempt assets managed	$1,100,000,000
International assets managed	$170,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	250
Types of accounts managed	CEFPU
No. of portfolio managers	14
Size of research staff	3

National Trust Co. is a Canadian firm that manages equity, fixed-income and balanced accounts.

The firm uses market timing and a quantitative approach to equities.

Interest rate anticipation, sector analysis and extensive duration, immunization and dedication of bond portfolios are used in fixed income.

The asset mix Jan. 1 was 40% Canadian stocks, 50% bonds and 10% U.S. stocks.

Duncan Baillie, senior vice president-investments and treasurer, is chief investment officer. John P. Melito, assistant vice president-employee benefits, is client contact.

Nationwide Insurance Cos.

1 Nationwide Plaza, Columbus, Ohio 43216; (614) 249-7111

Total assets managed	$11,115,000,000
Tax-exempt assets managed:	
Total	$3,119,000,000
Pooled accounts	$1,007,000,000
Separate accounts	$61,000,000
International assets managed	$10,000,000
401(k) and 457 assets managed	$1,386,000,000
GICs	$15,000,000
Annuities	$186,000,000
Other	$1,830,000,000
Minimum separate account	$10,000,000
Types of accounts managed	CEFG
No. of portfolio managers	22

Nationwide Insurance Cos. offer equity and balanced capabilities.

In equities, the firm takes a bottom-up approach and, within that framework, is opportunistic regarding individual stock selections.

In fixed income, managers generally buy and hold, but use some selling for tax purposes and portfolio improvement. Private placement repayments generate large cash flows that permit continuous portfolio restructuring.

In real estate, it identifies specific MSAs for lending, concentrating on developer and location. Emphasis is on multitenant property, preferably shopping centers and industrial and office buildings.

The asset mix Jan. 1 was 51% stocks, 15% bonds and 34% cash.

Clients include American Poultry, FCX, Battelle and Select Sires.

Chief investment officer is Peter F. Frenzer, executive vice president-investments. Client contact is John H. Williams, director-pension underwriting.

NC Capital Management

102 W. Fourth St., Williamsport, Pa. 17701; (717) 327-2163

Total assets managed	$904,000,000
Tax-exempt assets managed	$490,000,000
Tax-exempt clients	25
Types of accounts managed	CEFG
No. of portfolio managers	4
Size of research staff	1

NC Capital Management Group is an equity and fixed-income manager.

The equity approach emphasizes growth stocks. The fixed-income approach is based on the sector, quality and type of security.

Options are used.

The asset mix Jan. 1 was 35% stocks, 35% bonds, 5% cash, 10% mortgages 10% mortgage-backed securities and 5% GICs.

Clients include Lord Corp., Williamsport Foundation, Plumbers & Steamfitters Local 810 and VHA.

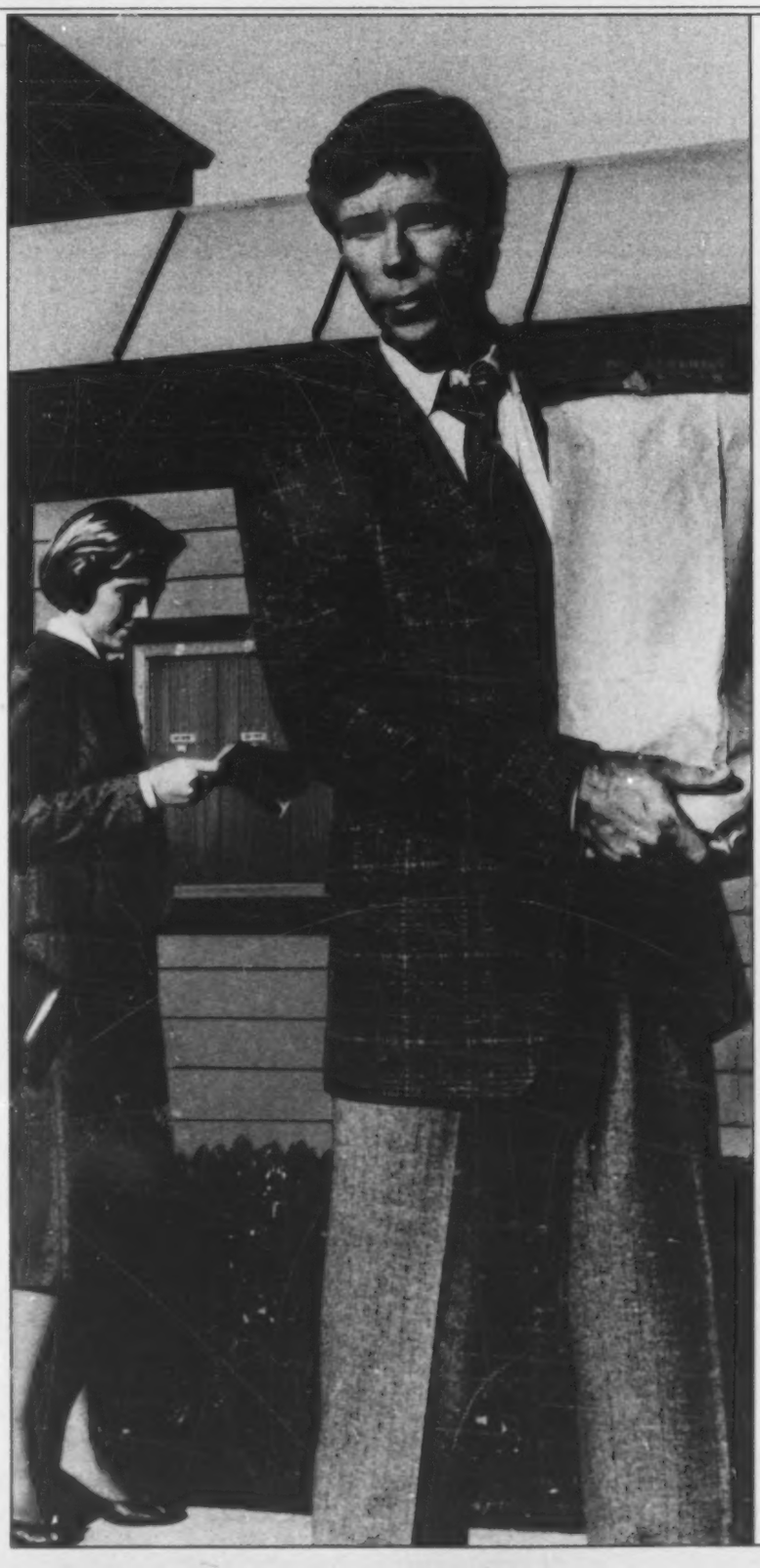
The firm is a subsidiary of Northern Central Bank, which is part of Keystone Financial Inc.

Sidney D. Furst III, director and chief executive officer, is chief investment officer. Marshall Raucci Jr., vice president-director of marketing, is client contact.

NCNB National Bank

1 NCNB Plaza, Charlotte, N.C. 28255; (704) 374-8405

Total assets managed	$6,081,000,000
Tax-exempt assets managed:	
Total	$2,701,000,000
Commingled accounts	$844,000,000
Separate accounts	$1,857,000,000
Real estate assets managed	$550,000,000
International assets managed	$180,000,000
401(k) and 457 assets managed	$60,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	



"I want to buy a home. *I want to buy a home so bad I can taste it. That's why my wife works, why I work a second job, why we've only eaten out twice in the last year. And in about six months, I think we just might have the down payment.*"

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LN

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2001 Bryan Tower Suite 3600
Dallas, Texas 75201 (214) 746-7111

Commingled	1,543
Separate	245
Types of accounts managed	CEFGJ
No. of portfolio managers	28
Size of research staff	8

NCNB National Bank is an equity, fixed-income, balanced and real estate manager.

In equities, the bank buys stocks whose prices appear low relative to the corporations' financial statements and balance sheets or historical price relationships to other issues or market indexes.

Using interest rate anticipation, the fixed-income approach evaluates and restructures portfolios to maximize total return while preserving capital and providing a high, stable level of income with reduced volatility and consistent returns.

Options and fixed-income futures are used.

In real estate, the bank buys or develops high-quality, income-producing, commercial and industrial property in the Southeast.

The Jan. 1 tax-exempt asset mix was 50% stocks, 20% bonds, 10% cash and 20% equity real estate.

Clients include United Telecommunications, Eastern Air Lines pilots, Duke Power and Columbia University.

Charles G. Smith IV, senior vice president, is chief investment officer. Mark S. Coltrin, vice president, is client contact.

Nelson, Benson & Zellmer

455 Sherman St., Suite 100, Denver, Colo. 80203; (303) 778-6800

Total assets managed	$318,000,000
Tax-exempt assets managed	$214,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	26
Types of accounts managed	CEFG
No. of portfolio managers	4

Nelson, Benson and Zellmer Inc. is an equity manager.

In equities, managers use a bottom-up approach to growth stocks. Emphasis is on growth of earnings, superior return on equity and quality management.

The fixed-income approach is passive, focusing on short- to intermediate-term government securities.

The asset mix Jan. 1 was 78% stocks, 11% bonds, 11% cash.

W. Peterson Nelson, president, is chief investment officer. John A. Benson, executive vice president, is client contact.

Neuberger and Berman

522 Fifth Ave., New York, N.Y. 10036; (212) 790-9669

Total assets managed	$9,587,000,000
Tax-exempt assets managed	$5,073,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	193
Types of accounts managed	CEFGJ
No. of portfolio managers	34
Size of research staff	12

Neuberger and Berman is an equity manager.

The equity approach combines low p/e, sector rotation and Graham & Dodd methods. Results come from constant expansion/contraction of equity, bond and cash positions across market cycles.

In fixed income, a market-oriented approach is used, concentrating on short- and intermediate-term maturities.

The asset mix Jan. 1 was 83.1% stocks, 1% bonds and 15.9% cash.

In 1985, the firm realized a $917 million net gain in new tax-exempt business; it added 31 clients.

Clients include Blue Cross/Blue Shield of Rochester, Beatrice, Eastman Kodak and Jostens.

Richard A. Cantor, president, is chief investment officer. Robert R. McComsey, chief operating officer, is client contact.

Newbold's Asset Management

1500 Walnut St., Philadelphia, Pa. 19102; (215) 893-8167

Total assets managed	$1,702,000,000
Tax-exempt assets managed	$1,232,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	74
Types of accounts managed	CEFG
No. of portfolio managers	11

Newbold's Asset Management is an equity manager emphasizing low p/e.

The Jan. 1 tax-exempt asset mix was 84% stocks and 16% cash.

Managers follow about 30 stocks closely and 120, generally.

Robert E. Clarke is client contact.

New England Mutual Life Insurance Co.

501 Boylston St., Boston, Mass. 02117; (617) 578-2000

Total assets managed	$11,764,000,000
Tax-exempt assets managed:	
Total	$4,695,000,000
Pooled accounts	$175,000,000
Separate accounts	$30,000,000
Real estate assets managed	$8,000,000
GICs	$2,071,000,000
Annuities	$28,000,000
Other	$2,391,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CGJ
No. of portfolio managers	40
Size of research staff	60

New England Mutual Life Insurance Co. offers equity and fixed-income capabilities.

The equity approach is characterized by sector rotation, a search for companies with the greatest potential for an earnings surge, concentration in 20 to 30 issues and a strong sell discipline.

In fixed income, the firm uses interest rate anticipation, sector analysis and credit analysis. Investments are in both the public bond and private placement markets.

The asset mix Jan. 1 was 83.4% stocks, 9.5% bonds, 3.3% cash and 3.8% mortgages.

Clients include Union Pacific, Pillsbury, Coca-Cola and Virginia.

The firm is affiliated with Loomis, Sayles & Co. and Copley Real Estate Advisors. Total assets of the parent and subsidiaries are $29.4 billion. Of that figure, $21 billion is tax-exempt.

Ralph F. Verni, executive vice president-finance, is chief investment officer. Client contact is Donald I. Gregg, senior vice president-group pension marketing.

Newhard, Cook Advisory Services Inc.

720 S. Colorado Blvd., Suite 170, Denver, Colo. 80222; (303) 753-9400

Total assets managed	$24,000,000
Tax-exempt assets managed	$7,000,000
Minimum separate account	$100,000
Tax-exempt clients	21
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	1

Newhard, Cook Advisory Services Inc. is an equity manager.

The firm uses highly disciplined equity portfolio management with heavy emphasis on computerized technical analysis and market timing.

On Jan. 1, all assets were in stocks.

The firm is a wholly owned subsidiary of Newhard, Cook and Co. Inc.

Howard J. Hebert, president, is chief investment officer. Mr. Hebert, Eric R. White and Larry E. Turner are client contacts.

New Japan Capital Management (USA) Inc.

1 World Trade Center, Suite 4959, New York, N.Y. 10048; (212) 938-5602

Total assets managed	$650,000,000
Tax-exempt assets managed	$0
Minimum separate account	$1,000,000
Types of accounts managed	CF
No. of portfolio managers	15
Size of research staff	3

New Japan Capital Management (USA) Inc. is an equity and international manager.

In equities, the optimum portfolio is chosen based on a by-industry, risk-return calculation. Market timing is used.

Noboru Imai, managing director, is chief investment officer. Hiroshi Takahashi, senior vice president, is client contact.

New Mexico Capital Management

7800 Marble N.E., Suite 8, Albuquerque, N.M. 87110; (505) 268-0072

Total assets managed	$51,000,000
Tax-exempt assets managed	$27,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$100,000
Tax-exempt clients	46
Types of accounts managed	CJ
No. of portfolio managers	2

New Mexico Capital Management is an equity manager.

The firm uses a bottom-up approach to identify best value among securities with strong balance sheets, low price-to-book and low p/e.

Interest rate anticipation and sector analysis are used in fixed income.

The asset mix Jan. 1 was 43% stocks, 45% bonds, 10% cash and 2% real estate.

Gerald S. Epstein, president, is chief investment officer. Thomas Christopher, executive vice president, is client contact.

Newport Pacific Management

500 Sansome St., San Francisco, Calif. 94111; (415) 781-5801

Total assets managed	$8,000,000
Tax-exempt assets managed	$2,000,000
International assets managed	$300,000
Minimum separate account	$1,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	1

Newport Pacific Management is primarily an international manager.

The equity approach specializes in small to medium-size growth companies in the Pacific Basin. The fixed-income approach uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 30% stocks, 50% bonds, 5% cash and 15% U.S. mutual funds invested in the Far East.

The firm is a subsidiary of Newport International Management Ltd.

John M. Mussey, president, is chief investment officer and client contact.

New York Life Insurance Co.

51 Madison Ave., New York, N.Y. 10010; (212) 576-7000

Total assets managed	$25,749,000,000
Tax-exempt assets managed:	
Total	$9,118,000,000
Pooled accounts	$294,000,000
Real estate assets managed	$34,000,000
GICs	$3,979,000,000
Annuities	$1,024,000,000
Other	$3,821,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CGJ
No. of portfolio managers	8
Size of research staff	15

New York Life Insurance Co. offers equity, fixed-income, real estate, convertible securities and money market capabilities.

In equities, the objective is to produce annual returns greater than the S&P 500. The firm owns stocks of companies with internal growth rates substantially greater than inflation.

In fixed income, managers combine an actively managed core with a partial timing approach. Buy/sell disciplines are heavily emphasized. Sector analysis is used.

The real estate approach seeks both capital appreciation and attractive current yields through a diversified portfolio of real assets. The long-term objective is to provide a rate of return in excess of inflation.

The tax-exempt asset mix as of Jan. 1 was 38.7% stocks, 31.7% bonds, 14.2% cash, 11.5% equity real estate and 3.9% convertible bonds.

The firm is affiliated with MacKay-Shields Financial Corp. Total assets of the parent company and subsidiaries are $31 billion. Of that, $11 billion are tax-exempt.

Clients include Eli Lilly, Georgia Pacific and Grand Union.

Chief investment officer is William E. Keiter, executive vice president. Client contact is Linda Livornese, manager.

Nicholas-Applegate Capital Management

701 B St., Suite 2040, San Diego, Calif. 92101; (619) 234-4472

Total assets managed	$478,000,000
Tax-exempt assets managed	$478,000,000
International assets managed	$4,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	27
Types of accounts managed	CEFGJ
No. of portfolio managers	4

Equity manager Nicholas-Applegate Capital Management uses a bottom-up approach emphasizing companies with potential for dramatic earnings acceleration, increased institutional ownership and strong relative price strength.

Options and stock index futures are used.

The Jan. 1 tax-exempt asset mix was 97% stocks, 2% bonds and 1% cash.

Clients include Burroughs, Colgate-Palmolive, The Common Fund and Eli Lilly.

Arthur E. Nicholas is chairman and chief investment officer. Fred Applegate, president, and Laura Stanley, marketing officer, are client contacts.

The Nicholson Group Inc.

7550 Red Road, Coral Gables, Fla. 33143; (305) 662-1760

Total assets managed	$8,000,000
Tax-exempt assets managed	$3,000,000
Minimum separate account	$100,000
Tax-exempt clients	6
No. of portfolio managers	1

The Nicholson Group Inc. is an equity manager.

The equity approach, which emphasizes growth stocks and market timing, invests primarily in fundamentally undervalued blue-chip and near-blue-chip stocks. Options are used.

As of Jan. 1, the firm was 100% invested in stocks.

Managers follow 120 stocks closely and 2,000, generally. About 75% of research is generated internally.

Robert Nicholson, president, is chief investment officer and client contact.

Nikko & Associates

350 Park Ave., New York, N.Y. 10022; (212) 319-2730

Total assets managed	$141,000,000
Tax-exempt assets managed	$32,000,000
International assets managed	$32,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	5
Types of accounts managed	CFJ
No. of portfolio managers	17

Nikko & Associates is an international manager offering growth and emerging growth stock management, regional active and specialized equity management and a Japanese stock index fund.

The asset mix as of Jan. 1 was 97.7% stocks and 2.3% cash.

Clients include Eli Lilly, ARA and Pacific Lighting.

Nikko Group of Japan's investment management arm owns 60% of Nikko & Associates.

Chief investment officers are M. Kaneko, S. Green and K. De Ryck. Mr. De Ryck, president, also is client contact.

Noddings-Calamos Asset Management

2001 Spring Road, Suite 750, Oak Brook, Ill. 60521; (312) 789-8444

Total assets managed	$120,000,000
Tax-exempt assets managed	$82,000,000
Minimum separate account	$250,000
Tax-exempt clients	9
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	6

Noddings-Calamos Asset Management is a convertible securities manager. The firm's equity approach is quantitative, emphasizing undervalued securities through mathematical and statistical models.

On Jan. 1, all assets were in convertible securities.

Clients include Johnson Controls and Wisconsin Electric.

John P. Calamos, president, is chief investment officer and client contact.

Foundations and endowments spotlighted June 9.

Nomura Capital Management

180 Maiden Lane, Suite 3703, New York 10038; (212) 509-8181

Total assets managed	$549,000,000
Tax-exempt assets managed	$345,000,000
International assets managed	$345,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	9
Types of accounts managed	CEFG
No. of portfolio managers	6

Nomura Capital Management Inc. is an international manager whose equity approach is based on valuation.

The firm actively manages portfolios in international markets using original fundamental and economic research with a global perspective.

The asset mix Jan. 1 was 92% stocks and 8% cash.

Clients include GE, GM, Hawaii Employees and Eli Lilly.

Nomura Capital is owned by Nomura Investment Management Co. Ltd., Tokyo.

Takeo Nakamura, president, is chief investment officer. Brian X. Fitzgibbon, senior vice president, is client contact.

Norstar Investment Advisory Services Inc.

45 East Ave., Fourth Floor, Rochester, N.Y. 14604; (716) 423-1900

Total assets managed	$1,300,000,000
Tax-exempt assets managed:	
Total	$588,000,000
Commingled accounts	$400,000,000
Separate accounts	$188,000,000
401(k) and 457 assets managed	$23,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	45
Separate	10
Types of accounts managed	CEFJ
No. of portfolio managers	10

Norstar Investment Advisory Services Inc. is an equity, balanced, fixed-income and money market manager.

In equities, managers seek low beta, low price-to-book value, low institutional ownership, low debt, high cash flow, high yield, insider buying and stocks underfollowed by analysts. Industry weightings are established in a top-down approach; convertibles are used extensively to minimize risk.

In fixed income, the interest rate outlook is key, within the context of economic growth, credit demand and the Federal Reserve posture. Value is added by emphasizing sinking funds/bonds, using variations in spreads and by advantageous positioning on the yield curve.

The Jan. 1 asset mix was 60% stocks, 30% bonds and 10% cash.

James A. Knauf Jr., president and chief executive officer, is chief investment officer. Client contacts are Stephen J. Wydysh and Peter W. Mye, marketing officers.

North American Capital Management

Box 25275, Overland Park, Kan. 66225; (913) 541-1688

Total assets managed	$10,000,000
Tax-exempt assets managed	$2,000,000
401(k) and 457 assets managed	$250,000
Minimum separate account	$80,000
Tax-exempt clients	20
Types of accounts managed	CJ
No. of portfolio managers	1
Size of research staff	1

North American Capital Management, an equity manager, uses top-down technical analysis to find attractive investments among the 1,000 largest-cap stocks. Market timing is a significant part of the process.

Fixed-income management is generally passive, but at times is opportunistic, using interest rate anticipation.

Options are used.

The asset mix Jan. 1 was 95% stocks and 5% cash.

Robert J. McElwain, president, is chief investment officer and client contact.

Northern Trust Corp.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

Total assets managed	$18,000,000,000
Tax-exempt assets managed:	
Total	$7,971,000,000
Commingled accounts	$7,571,000,000
Passive assets managed	$900,000,000
Tax-exempt clients	325
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	11

The Northern Trust Corp. offers equity, fixed and balanced management, and has real estate and international capabilities.

The equity approach follows a passively managed quantitative strategy emphasizing growth and emerging growth stocks. Collective funds include diversified, concentrated, hedged, special and equity index funds. Options and stock index futures are used.

The bond approach uses a passive strategy with interest rate anticipation and sector analysis. Collective funds include short-, intermediate- and long-term funds. Northern Trust manages index funds as well as dedicated and immunized portfolios.

It had $800 million in equity index funds and $100 million in dedicated or immunized portfolios for tax-exempt clients Jan. 1.

As of Jan. 1, the tax-exempt asset mix was 2.5% stocks, 3.3% bonds and 94.2% cash.

Northern Trust follows 500 stocks closely and 1,200, generally; 60% of research is generated internally.

Clients include The Museum of Science and Industry, Old Republic International, Central Illinois Public Service and Tecumseh Products.

John W. Hogge, senior vice president, is the chief investment officer. The client contact is William D. Naftzger, vice president.

Northwestern Mutual Life Insurance Co.

720 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 271-1444

Total assets managed	$16,784,000,000
Tax-exempt assets managed:	
Total	$1,211,000,000
Separate accounts	$498,000,000
Types of accounts managed	C

Northwestern Mutual Life Insurance Co. handles equity, fixed-income and balanced accounts.

The equity approach emphasizes sector rotation, while the fixed-income approach relies on sector analysis.

The asset mix Jan. 1 was 51.2% stocks, 39.7% bonds and 9.1% cash.

Chief investment officer is James D. Ericson, senior vice president. Client contact is Thomas M. Chiappetti.

Northwestern National Life Insurance Co. (Washington Square Capital)

512 Nicollet Mall, Box 9402, Minneapolis, Minn. 55440; (612) 342-3332

Total assets managed	$4,226,000,000
Tax-exempt assets managed	$2,506,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	521
Types of accounts managed	CG
No. of portfolio managers	7
Size of research staff	13

Northwestern National Life Insurance is a guaranteed investment contract manager.

Equity accounts are managed through Hahn Holland & Grossman, an affiliate, and fixed-income accounts through Lotsoff Capital Management.

The asset mix Jan. 1 was 58% bonds, 27% mortgages and 15% short-term investments.

Clients include General Mills, Pillsbury and Southern California Edison.

Washington Square Capital is a wholly owned subsidiary of NWNL and manages NWNL's assets.

Steven W. Wishart, president, is chief investment officer. Elizabeth R. Speak, vice president of marketing, is client contact.

NorthWest Quadrant Inc.

369 San Miguel Drive, Suite 245, Newport Beach, Calif. 92660; (714) 720-9232

Total assets managed	$40,000,000
Tax-exempt assets managed	$30,000,000
Minimum separate account	$400,000
Tax-exempt clients	67
Types of accounts managed	CF
No. of portfolio managers	3
Size of research staff	1

NorthWest Quadrant Inc. is an equity manager.

The firm manages portfolios that are fully invested, broadly diversified and tend to fluctuate 40% less than the option writing, convertible securities and closed-end funds.

The asset mix Jan. 1 was 95% stocks and 5% cash.

Clients include Pyrotek, American Rice Growers and Hood Corp.

Roger W. Wilson, president, is chief investment officer. Nancy Sweet, vice president, is client contact.

Norwest Capital Management

Eighth and Marquette Avenue, Minneapolis, Minn. 55439; (612) 372-9493

Total assets managed	$4,026,000,000
Tax-exempt assets managed:	
Total	$2,039,000,000
Commingled accounts	$761,000,000
Separate accounts	$1,278,000,000
International assets managed	$5,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	11
Size of research staff	5

Norwest Capital Management offers equity, fixed-income and balanced capabilities.

The equity approach is diversified with an emphasis on valuation. Quantitative analysis is used to identify growth and emerging growth stocks.

The bond approach combines sector analysis with interest rate anticipation; high-quality issues are used.

Options, stock index futures and fixed-income futures are used.

As of Jan. 1, the tax-exempt asset mix was 60% stocks, 29% bonds, 5% cash and 6% mortgage-backed securities.

The company follows 400 stocks closely and 500, generally; 75% of the research is generated internally.

Clients include Northern States Power, Bemis, Valspar and Republic Airlines.

John Caswell, vice president, is the chief investment officer. Robert W. Edgar Jr. is the client contact.

NSR Asset Management

605 Third Ave., New York, N.Y. 10158; (212) 687-2200

Total assets managed	$374,000,000
Tax-exempt assets managed	$374,000,000
International assets managed	$5,000,000
Minimum separate account	$2,500,000
Tax-exempt clients	16
Types of accounts managed	CE
No. of portfolio managers	3

NSR Asset Management Corp. is an equity, fixed-income and balanced manager.

Equity selection is result of a search for best relative values. The firm employs a disciplined approach to asset allocation and views buy/sell disciplines as essential in security selection.

Its fixed income approach is based on changes in the risk/reward relationship between various types of securities and the long-term sources of return to bond investors.

The asset mix Jan. 1 was 57.3% stocks, 26.9% bonds and 15.8% cash.

NSR is wholly owned by National Securities & Research Corp., a subsidiary of Aitken Hume International.

Clients include National Steel, University of Missouri and Brooklyn Union Gas.

Chief investment officer and client contact is William R. Sadler, chief executive officer.

NWQ Investment Management Co.

606 S. Olive St. No. 1410, Los Angeles, Calif. 90014; (213) 613-1053

Total assets managed	$490,000,000
Tax-exempt assets managed	$437,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	78
Types of accounts managed	CPGJ
No. of portfolio managers	5
Size of research staff	1

NWQ Investment Management Co. is an equity and balanced manager.

The equity approach seeks securities that are undervalued. Managers emphasize above-average dividend yields, below-average p/e and low price-to-book value.

Fixed-income securities are used only when returns are substantially above the coupon rate.

The asset mix Jan. 1 was 78%

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Or write to them at 551 Madison Avenue, New York, NY 10022.

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Mellon Real Estate Investment Management Corporation

stocks, 8% bonds and 14% cash.

In 1985, the firm realized a $93 million gain in new tax-exempt business. Twenty-five clients were added.

Clients include Burroughs, government of American Samoa, Jacobs Engineering Group and Motion Picture Industry Pension Plan.

David A. Polak is chief investment officer. James P. Owen is client contact.

O

Oakwood Counselors Inc.

888 Seventh Ave., New York, N.Y. 10106; (212) 757-6495

Total assets managed	$52,000,000
Tax-exempt assets managed	$11,000,000
Minimum separate account	$100,000
Tax-exempt clients	27
Types of accounts managed	CJ
No. of portfolio managers	4
Size of research staff	5

Oakwood Counselors Inc. is a balanced manager.

In equities, the firm is a conceptual investor, investing in the beneficiaries of secular trends.

The firm's fixed-income approach anticipates credit spreads and interest rate curves.

The asset mix Jan. 1 was 44% stocks, 30% bonds and 26% cash.

Paul J. Sherman, president, is chief investment officer. Kenneth H. Mantel, vice president, and Ronda Brandes, treasurer, are client contacts.

J.W. O'Connor & Co. Inc.

200 Park Ave., New York, N.Y. 10166; (212) 687-7420

Total assets managed	$290,000,000
Tax-exempt assets managed	$290,000,000
Real estate assets managed	$90,000,000
Minimum separate account	$100,000,000
Tax-exempt clients	2
Types of accounts managed	CG

J.W. O'Connor & Co. Inc. is a real estate manager. The firm seeks intrinsic value in investments and focuses on physical quality, location, purchase price vs. replacement cost, current vs. market rents, cash-on-cash returns and property upgrade potential.

As of Jan. 1, 31% of the assets were in equity real estate and 69% in cash, awaiting investment in the real estate market.

The firm had a net gain of $200 million in new tax-exempt business in 1985; one client was added.

Clients include AT&T and Kansas Public Employees.

Chief investment officer is Jeremiah W. O'Connor Jr., president. Client contact is Benjamin G. Gifford, vice president.

O'Herron & Co. Inc.

1300 St. Mary's, Raleigh, N.C. 27605; (919) 834-9224

Total assets managed	$22,000,000
Tax-exempt assets managed	$18,000,000
Minimum separate account	$500,000
Tax-exempt clients	27
Types of accounts managed	CEF
No. of portfolio managers	2

O'Herron & Co. Inc., an equity manager, focuses on value-oriented investments with relatively low p/e ratios and strong balance sheets. About 50% of stocks are in companies headquartered in North and South Carolina.

In fixed income, the firm primarily uses convertible bonds, along with some government securities with maturities of five years or less.

The asset mix Jan. 1 was 75% stocks, 11% bonds and 14% cash.

Clients include N.C. Museum of Art Foundation, Raleigh News & Observer and Ocean View Memorial Foundation.

Chief investment officer and client contact is James J. Green, president.

The Ohio Co.

155 E. Broad St., Columbus, Ohio 43215; (614) 464-5545

Total assets managed	$341,000,000
Tax-exempt assets managed	$258,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	58
Types of accounts managed	CEFJ
No. of portfolio managers	4
Size of research staff	4

The Ohio Co. is an equity, fixed-income and balanced manager.

In equities, the firm seeks better-than-average earnings and dividend growth, higher-than-average return on equity and above-average yields weighted with lower p/es and betas.

Its fixed-income approach is defensive. Issue and interest rate risk are eliminated through use of government issues of short to intermediate maturity.

The asset mix Jan. 1 was 63% stocks, 30% bonds, 6% cash and 1% mortgage-backed securities.

Chief investment officer is C.A. Peterson, executive vice president and director. Client contact is William D. Lange, assistant vice president.

Old Kent Bank and Trust Co.

1 Vandenberg Center, Grand Rapids, Mich. 49503; (616) 774-5893

Total assets managed	$2,132,000,000
Tax-exempt assets managed:	
Total	$966,000,000
Commingled accounts	$436,000,000
Separate accounts	$530,000,000
Real estate assets managed	$22,000,000
401(k) and 457 assets managed	$20,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	473
Separate	40
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	3

Old Kent National Bank and Trust Co. offers equity, fixed-income, balanced and real estate capabilities.

Equity portfolios are well diversified, ranking at parity with the S&P 500 in terms of quality and risk, but slightly lower in dividend yields. Interest rate-sensitive and highly regulated industries are de-emphasized.

It favors active bond management based on interest rate anticipation within the confines of a two- to six-year average maturity with high-quality issues.

It selects open-end real estate portfolios with an emphasis on equity investments outside the Midwest.

The Jan. 1 tax-exempt asset mix was 23% stocks, 60% bonds, 15% cash and 2% equity real estate.

Clients include Steelcase, Blue Cross/Blue Shield of Michigan, Rospatch and Grand Rapids.

The bank holding company is Old Kent Financial Corp.

James M. LaFleur, senior vice president, is the chief investment officer. The client contact is Gary L. Church, vice president.

Old Stone Trust Co.

180 S. Main St., Providence, R.I. 02903; (401) 278-2017

Total assets managed	$307,000,000
Tax-exempt assets managed:	
Total	$92,000,000
Commingled accounts	$12,000,000
Separate accounts	$80,000,000
International assets managed	$1,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$100,000
Tax-exempt clients:	
Commingled	36
Separate	150
Types of accounts managed	CEFG
No. of portfolio managers	5

Old Stone Trust Co. offers equity, fixed-income and balanced capabilities. It also offers international management through mutual funds.

The equity approach combines Graham & Dodd, growth stocks and market timing.

The fixed-income approach uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 25% stocks, 65% bonds and 10% cash.

It follows 60 stocks closely and 125, generally.

John G. O'Neill, vice president and trust officer, is the chief investment officer. The client contact is Richard H. Brandon, senior vice president.

Oppenheimer Capital Corp.

1 New York Plaza, New York, N.Y. 10004; (212) 825-8233

Total assets managed	$8,211,000,000
Tax-exempt assets managed	$7,790,000,000
401(k) and 457 assets managed	$2,000,000
Passive assets managed	$101,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	230
Types of accounts managed	CEFGJ
No. of portfolio managers	16
Size of research staff	5

Oppenheimer Capital Corp. is an equity, fixed-income and balanced manager.

The firm's equity approach analyzes elements of value that include business segments, undedicated cash flow and hidden assets. Asset allocation is determined by analyzing financial liquidity and levels of market valuation.

In fixed income, it searches for those companies whose debt securities are underrated and undervalued.

The asset mix Jan. 1 was 66% stocks, 12% bonds, 12% cash and 10% options.

A net gain of $923.4 million in new tax-exempt business was recorded in 1985; 24 clients were added.

Clients include Caterpillar Tractor, National Elevator Industry Pension Plan, New York City and AMA.

Oppenheimer Capital, owned by Mercantile House Holdings, is reverting to private ownership.

Chief investment officer is Joseph M. La Motta, president. Client contact is Frank P.L. Minard, senior vice president.

Oregon Bank

P.O. Box 2808, 1001 S.W. Fifth Ave., Portland, Ore. 97123; (503) 222-7611

Total assets managed	$133,000,000
Tax-exempt assets managed:	
Total	$61,000,000
Commingled accounts	$13,000,000
Separate accounts	$48,000,000
Real estate assets managed	$300,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$100,000
Tax-exempt clients:	
Commingled	60
Separate	15
Types of accounts managed	CEF
No. of portfolio managers	3

Oregon Bank offers equity, fixed-income and balanced capabilities.

It uses a disciplined, undervalued approach to equity selection with an emphasis on low p/e issues and with a modest bias toward Pacific Northwest companies. The bond approach emphasizes principal stability and consistency of returns by limiting maturities to 10 years or less and minimizing credit risk.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

Robert T. Platt, senior vice president, is the chief investment officer. Arthur W. Kriegsmann, vice president, is the client contact.

P

Pacific Asset Management

655 Montgomery St., Suite 1410, San Francisco, Calif. 94111; (415) 362-6117

Total assets managed	$263,000,000
Tax-exempt assets managed	$101,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	22
Types of accounts managed	CEF
No. of portfolio managers	4
Size of research staff	2

Pacific Asset Management is a balanced manager. In equities, managers invest in companies with consistently high returns on assets and sales and positive sales growth dynamics.

The fixed-income approach is passive and concentrates on short- to intermediate-term bonds.

The asset mix Jan. 1 was 48% stocks, 44% bonds and 8% cash.

Robert M. Sutton, general partner, is chief investment officer. Andrew F. Mathieson is client contact.

The Pacific Century Group

1200 Third Ave., Suite 1800, San Diego, Calif. 92101; (619) 544-1252

Total assets managed	$3,000,000,000
Tax-exempt assets managed	$250,000,000
Minimum separate account	$5,000
Tax-exempt clients	10
Types of accounts managed	CF
No. of portfolio managers	5
Size of research staff	3

The Pacific Century Group is an equity and fixed-income manager.

In equities, managers have three approaches: aggressive growth/small cap; equity income; and convertible securities.

The fixed-income approach emphasizes high-yield portfolios with low volatility.

The Jan. 1 tax-exempt asset mix is 25% stocks, 25% bonds and 50% cash.

The firm is a wholly owned subsidiary of Security Pacific Corp.

James Caywood, managing director, is chief investment officer.

Pacific Financial Research

9665 Wilshire Blvd., Suite 950, Beverly Hills, Calif. 90212; (213) 278-4461

Total assets managed	$885,000,00
Tax-exempt assets managed	$862,000,00
Real estate assets managed	$46,000,00
International assets managed	$57,000,00
Minimum separate account	$25,000,00
Tax-exempt clients	
Types of accounts managed	CEF
No. of portfolio managers	
Size of research staff	

Pacific Financial Research is an equity manager.

Its equity approach has a Graham & Dodd orientation. Managers seek to buy stocks at a discount to the price a rational private buyer would be willing to pay for the whole company.

Bonds are used only when they are intrinsically cheaper than stocks.

The firm has $46 million in mortgage-backed securities and $57 million in international equities.

The asset mix Jan. 1 was 48% stocks, 23% bonds, 22% cash and 7% mortgage-backed securities.

In 1985, the firm realized a $282 million net gain in new tax-exempt business; 14 clients were added.

Clients include Lockheed, FMC, GTE and PSA.

James Gipson, president, is chief investment officer. Norman B. Williamson, vice president, is client contact.

Pacific Investment Management Co.

840 Newport Center Drive, Suite 360, Newport Beach, Calif. 92660; (714) 640-3031

Total assets managed	$10,044,000,00
Tax-exempt assets managed	$9,999,000,00
Tax-exempt clients	
Types of accounts managed	CEFG
No. of portfolio managers	
Size of research staff	

Pacific Investment Management Co. primarily is a fixed-income manager.

Its equity style reflects a growth orientation, within the context of a valuation methodology.

Its fixed-income approach is active with a longer-term focus. A secular and cyclical overview determines duration. Managers seek value across all sectors of the bond market. Financial futures and options are used extensively.

The asset mix Jan. 1 was 2% stocks, 79% bonds and 19% cash.

In 1985, the firm realized a $47 million net gain in new tax-exempt business; nine clients were added.

Clients include AT&T, Amoco, Chevron and Boeing.

The firm is a wholly owned subsidiary of Pacific Financial Cos., formerly Pacific Mutual Life Insurance Co.

James F. Muzzy, managing director, is client contact.

Palley-Needelman Asset Management Inc.

1501 Quail St., Suite 110, Newport Beach, Calif. 92660; (714) 752-223

Total assets managed	$52,000,00
Tax-exempt assets managed	$33,000,00
401(k) and 457 assets managed	$2,000,00
Minimum separate account	$500,00
Tax-exempt clients	
Types of accounts managed	CEF
No. of portfolio managers	

Palley-Needelman Asset Management Inc. is a balanced manager.

The equity approach emphasizes undervalued, financially strong companies with low p/es, high yields, positive cash flows and unrecognized assets.

The fixed-income strategy stresses economic and interest rate cycles, liquidity, inflation and the yield curve.

The asset mix Jan. 1 was 65% stocks, 25% bonds and 10% cash.

Roger B. Palley, president, is chief investment officer. He and Chet J. Needelman, chief executive officer, are client contacts.

Palm Beach Capital Management Inc.

151 Royal Palm Way, Palm Beach, Fla. 33480; (305) 655-4690

Total assets managed	$262,000,00
Tax-exempt assets managed:	
Total	$14,000,00
Separate accounts	$14,000,00

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The two highest ranking bond funds in the SEI Funds Evaluation Services universe, for the five and three year periods ended December, 1985, were managed by the Capital Management Group, Delaware Trust Company.

The highest ranking municipal bond fund in Nuveen & Co.'s universe, for the five and three year periods ended December, 1985, was managed by the Capital Management Group, Delaware Trust Company.

The highest yielding institutional tax-exempt money market fund in Donoghue's Money Market Report, for the twelve months ended December, 1985, was the half-billion dollar Trust-Funds Tax Exempt Trust-Eastern Portfolio, managed by the Capital Management Group, Delaware Trust Company.

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DELAWARE TRUST

Minimum separate account	$1,000,000
Tax-exempt clients	6
Types of accounts managed	CEF
No. of portfolio managers	3

Palm Beach Capital Management Inc. offers equity, fixed-income and balanced management as well as options strategies.

The equity approach emphasizes low p/e while looking for above-average companies (EPS growth, operating margins and dividend yield) at below-average valuations.

The bond approach uses yield curve and sector analysis within the context of the most probable macroeconomic forecast.

The Jan. 1 tax-exempt asset mix was 43% stocks, 37% fixed income and 20% cash.

Palm Beach Capital is a subsidiary of First National Bank in Palm Beach.

Jon F. Goebel, senior vice president, is the chief investment officer. The client contact is Floyd L. Wideman Jr., executive vice president.

The Palmieri Co.

2021 K St. N.W., Suite 700, Washington, D.C. 20006; (202) 223-8690

Total assets managed	$1,600,000,000
Tax-exempt assets managed	$300,000,000
Real estate assets managed	$200,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	10
Types of accounts managed	CEG

The Palmieri Co. is a real estate manager concentrates on active management of turnaround situations.

The Jan. 1 tax-exempt asset mix was 35% equity real estate, 30% mortgages and 35% cash.

John A. Koskinen, president, is chief investment officer and client contact.

Parker Dillon Carlson & Johnson

1416 Miamisburg-Centerville Road, Dayton, Ohio 45459; (513) 439-1010

Total assets managed	$17,000,000
Tax-exempt assets managed	$14,000,000
401(k) and 457 assets managed	$200,000
Minimum separate account	$1,000,000
Tax-exempt clients	13
Types of accounts managed	C
No. of portfolio managers	3

Parker Dillon Carlson & Johnson is an equity and balanced manager.

In equities, managers use a disciplined valuation process, concentrating on issues with market capitalizations of between $100 million and $1 billion.

Its fixed-income approach is passive.

The asset mix Jan. 1 was 60% stocks, 35% bonds and 5% cash.

Leslie O. Parker III, president, is chief investment officer. Gayle Rominger, vice president-marketing, is client contact.

Parmelee Management Corp.

950 Third Ave., New York, N.Y. 10022; (212) 753-1597

Total assets managed	$48,000,000
Tax-exempt assets managed	$36,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$500,000
Tax-exempt clients	30
Types of accounts managed	C
No. of portfolio managers	1

Parmelee Management Corp. is an equity manager concentrating on low p/e, growth equities that will benefit from disinflation.

Fixed-income securities are used only when their yield exceeds the yield potential of equities.

The asset mix Jan. 1 was 69% stocks, 23% bonds and 8% cash.

Alfred Gray Parmelee, president, is chief investment officer. Clare M. Stenstrom, corporate secretary, is client contact.

PCM International

5 Prudential Plaza, Newark, N.J. 07101; (201) 877-7982

Total assets managed	$1,295,000,000
Tax-exempt assets managed	$422,000,000
International assets managed	$422,000,000
Tax-exempt clients	17
Types of accounts managed	C
No. of portfolio managers	5
Size of research staff	1

PCM International is an international manager.

In equities, it is a value-oriented global stock picker, with defensive technical overlay in market timing and currency hedging.

For fixed income, managers use active currency allocation and active maturity management to purchase high-quality bonds.

The asset mix Jan. 1 was 47% stocks, 48% bonds and 5% cash.

Clients include Sony, MIB, Stanford University and Prudential.

The firm is a wholly owned subsidiary of The Prudential Insurance Co. of America.

Barry Gillman, managing director, is chief investment officer and client contact.

The Peckham Boston Co.

4 Longfellow Place, No. 3305, Boston, Mass. 02114; (617) 523-4440

Total assets managed	$15,000,000
Tax-exempt assets managed	$15,000,000
Real estate assets managed	$15,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	4
Types of accounts managed	C

The Peckham Boston Co. is real estate manager.

The equity real estate approach uses investments in conservative cash flow and growth-oriented real estate properties leased to major corporate credit tenants.

As of Jan. 1, all assets were in equity real estate.

John M. Peckham III, president, is chief investment officer.

Pell, Rudman & Co.

88 Broad St., Boston, Mass. 02110; (617) 542-6633

Total assets managed	$350,000,000
Tax-exempt assets managed	$20,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	5
Types of accounts managed	F
No. of portfolio managers	4
Size of research staff	1

Pell, Rudman & Co. is a balanced manager.

In equities, the firm is a value investor looking for one or two superior performers in different market sectors.

In fixed income, tax-exempt bonds of short and intermediate maturities are emphasized because most clients are individuals.

The asset mix Jan. 1 was 47% stocks, 48% bonds and 5% cash.

Anthony D. Pell, executive vice president, is chief investment officer and client contact.

Penmark Investments

222 N. Dearborn St., Chicago, Ill. 60015; (312) 641-6577

Total assets managed	$230,000,000
Tax-exempt assets managed	$130,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	7
Types of accounts managed	CFG
No. of portfolio managers	2
Size of research staff	1

Penmark Investments is a balanced manager.

In equities, it emphasizes low p/e, earnings-per-share growth prospects greater than the S&P 500 over the next one to two years and income-oriented stocks with growing dividend streams.

In fixed income, it uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

Clients include Beatrice Foundation, Mercy Hospital and Chicago Park District. Sal Alaia, senior vice president, is chief investment officer and client contact.

The Penn Mutual Life Insurance Co.

Independence Square, Philadelphia, Pa. 19172; (215) 625-5000

Total assets managed	$3,300,000,000
Tax-exempt assets managed:	
Total	$537,000,000
Pooled accounts	$102,000,000
401(k) and 457 assets managed	$64,000,000
GICs	$297,000,000
Annuities	$153,000,000
Other	$483,000,000
Types of accounts managed	CE
No. of portfolio managers	1
Size of research staff	2

The Penn Mutual Life Insurance Co.

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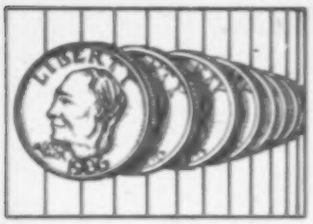

is an equity and fixed-income manager.

Its equity approach emphasizes fundamental analysis and factors that indicate above-average future growth in earnings per share.

In fixed income, managers maintain a reasonable match of yields and durations between product liabilities and investment grade investments that will produce a reasonable profit.

The mix of tax-exempt assets Jan. 1 was 85% stocks and 15% cash.

Kenneth M. Miller, senior vice president, is chief investment officer. Client contact is Randell G. Craig, vice president-national accounts/pension sales.

Penreal Advisors Ltd.

Suite 500, 1100 Melville St., Vancouver, B.C. V6E 4A6; (604) 685-8351

Total assets managed	$76,000,000(U.S.)
Tax-exempt assets managed:	
Total	$76,000,000
For subsidiaries of U.S. firms	$20,000,000
Real estate assets managed	$76,000,000
Tax-exempt clients:	
Total	50
U.S. subsidiaries	15
Types of accounts managed	CU
No. of portfolio managers	3
Size of research staff	2

Penreal Advisors Ltd., a Canadian real estate manager, acquires and develops quality real estate in those Canadian cities having strong growth potential.

Management is performance oriented and emphasizes intensive value-added property management and active portfolio management.

Walter R. Badun, chairman and chief executive officer, is chief investment officer. Garth D. Carefoot, vice president-finance, is the client contact.

Pension Management Co.

541 Post Oak Tower, Houston, Texas 77056; (713) 552-1880

Total assets managed	$25,000,000
Tax-exempt assets managed	$25,000,000
401(k) and 457 assets managed	$500,000
Tax-exempt clients	20
Types of accounts managed	CEGJ
No. of portfolio managers	2
Size of research staff	2

Pension Management Co. is an equity, fixed-income and balanced manager.

In equities, the firm has developed a proprietary computer program to identify stocks.

In fixed income, the firm uses interest rate anticipation, sector analysis and convertibles.

The asset mix Jan. 1 was 25% stocks, 70% bonds and 5% cash.

John H. Lee is chief investment officer and client contact.

Perkins Capital Management

919 Twelve Oaks Center, 15500 Wayzata Blvd., Wayzata, Minn. 55391; (612) 473-8307

Total assets managed	$25,000,000
Tax-exempt assets managed	$15,000,000
Minimum separate account	$250,000
Tax-exempt clients	18
Types of accounts managed	CEFJ
No. of portfolio managers	1
Size of research staff	1

Perkins Capital Management Inc. is an equity manager.

The equity approach uses market timing and stock selection to focus on companies undergoing change that may not have been recognized in the market.

In fixed income, the firm seeks maximum income consistent with perceived quality and interest rate forecasts.

The asset mix Jan. 1 was 85% stocks, 10% bonds and 5% cash.

Richard W. Perkins, president, is chief investment officer and client contact.

M. Pescatello & Co. Inc.

120 Broadway, Suite 3018, New York, N.Y. 10271; (212) 227-5200

Total assets managed	$304,000,000
Tax-exempt assets managed	$186,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	2

M. Pescatello & Co. Inc. is a balanced manager.

The firm is a long-term equity investor, basing decisions on fundamental analysis and focusing on attractive industries. Company prospects are analyzed and many market segments are represented.

In fixed income, the firm uses convertibles and emphasizes the value of the underlying equity.

The asset mix Jan. 1 was 84% stocks, 11% bonds and 5% cash.

American Electric Power is a client.

Michael Pescatello is chief investment officer. Edward Pescatello is client contact.

Petroleum & Resources

201 N. Charles St., Baltimore, Md. 21201; (301) 752-5900

Total assets managed	$268,000,000
Tax-exempt assets managed	$0
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	9

Petroleum & Resources Corp. is an equity manager specializing in energy and natural resource industries.

Managers seek undervalued securities by concentrating on microfactors affecting these industries as well as macro supply and demand factors. Options are used.

All research is generated internally.

The firm is partly owned by The Adams Express Co.

W.D. MacCallan, chairman, is chief investment officer. Monica C. Loh, vice president-investment advisory services, is client contact.

Philadelphia Investment Management Group

1616 Walnut St., Suite 2011, Philadelphia, Pa. 19103; (215) 545-0079

Total assets managed	$40,000,000
Tax-exempt assets managed	$12,000,000
Minimum separate account	$300,000
Tax-exempt clients	4
Types of accounts managed	CEFJ
No. of portfolio managers	3
Size of research staff	2

Philadelphia Investment Management Group is an equity manager investing in stocks with low institutional ownership and analyst coverage, screening for low p/e and other value indicators.

In fixed income, it concentrates on convertible bonds, preferreds and straight corporate debt.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

Alexander Parkhurst, executive vice president, is chief investment officer. He and William Shettle, president, are client contacts.

Phoenix Mutual Life Insurance Co.

1 American Row, Hartford, Conn. 06115; (203) 275-5000

Total assets managed	$4,205,300,000
Tax-exempt assets managed:	
Total	$1,215,300,000
Pooled accounts	$332,300,000
Separate accounts	$31,300,000
Real estate assets managed	$120,200,000
CIGs	$504,000,000
Annuities	$40,000,000
Other	$273,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CG
No. of portfolio managers	7

Phoenix Mutual Life Insurance Co. offers equity, fixed-income, balanced and real estate capabilities.

In equities, while the primary goal is appreciation, there is heavy emphasis on loss avoidance. The firm seeks appreciation through value and attempting to own industries where growth is anticipated.

In fixed income, through careful use of both fundamental and technical analysis, the objective is to participate in those sectors of the bond market that will provide the most value, with careful view to preservation of capital.

In real estate, managers acquire commercial properties capable of producing a high current rate of return while experiencing appreciation in real value. The firm buys both existing and to-be-built properties.

The asset mix Jan. 1 was 20% stocks, 26% bonds, 16% cash and 38% equity real estate.

Clients include Connecticut, Armstrong Rubber, Hartford Hospital and McGraw-Hill.

The firm is affiliated with Phoenix Investment Counsel Inc. and Phoenix Equity Planning Corp.

Chief investment officer is Philip R. Reynolds, executive vice president. Client contact is H. Russell Irving, vice president-group pension marketing.

Piedmont Capital Management Associates

3312 Piedmont Road, Suite 320, Atlanta, Ga. 30305; (404) 231-1826

Total assets managed	$250,000,000
Tax-exempt assets managed	$12,000,000
Real estate assets managed	1,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	4
Types of accounts managed	J
No. of portfolio managers	2

Piedmont Capital Management Associates Inc. is a fixed-income manager.

Its approach identifies seasonal, cyclical and secular trends in interest rates. Maturity and sector distribution is the focus of attention. Equities are appraised based on interest trends as a measure of investment risk and future earnings and dividend growth. Options are used.

The Jan. 1 tax-exempt asset mix was 90% bonds and 10% mortgage-backed securities.

Walter M. Campbell, president, is chief investment officer. Margot R. McCord, vice president, is client contact.

Pilgrim, Baxter, Hoyt & Greig

1255 Drummers Lane, Wayne, Pa. 19087; (215) 341-9000

Total assets managed	$855,000,000
Tax-exempt assets managed	$855,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	18
Types of accounts managed	CEG
No. of portfolio managers	1
Size of research staff	5

Pilgrim, Baxter, Hoyt & Greig is an equity manager emphasizing growth and emerging growth stocks.

The asset mix Jan. 1 was 88% stocks and 12% cash.

In 1985, the firm realized a $454 million net gain in new tax-exempt business; 10 clients were added.

Clients include Tenneco, Bank of America, New York State Teachers and Kansas Employees.

Gary L. Pilgrim is chief investment officer. Harold T. Baxter, president and chief executive officer, is client contact.

Pilgrim Management Corp.

222 Bridge Plaza South, Fort Lee, N.J. 07024; (201) 461-7500

Total assets managed	$1,100,000,000
Tax-exempt assets managed	$100,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	30
Types of accounts managed	C
No. of portfolio managers	5
Size of research staff	4

Pilgrim Management Corp. is an equity manager with a growth stock orientation.

In fixed income, managers focus on companies that consistently raise their dividends, have low debt, strong balance sheets and low p/e ratios.

The asset mix Jan. 1 was 95% stocks and 5% bonds.

William J. Lippman, president, is chief investment officer and client contact.

Pioneering Management

60 State St., Boston, Mass. 02109; (617) 742-7825

Total assets managed	$5,700,000,000
Tax-exempt assets managed	$1,900,000,000
401(k) and 457 assets managed	$100,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	50
Types of accounts managed	CEPGJ
No. of portfolio managers	7
Size of research staff	12

Pioneering Management Corp. is an equity, fixed-income and balanced manager.

Equity investment focuses on selection of individual stocks using a consistent value-oriented approach with long-term investment horizons.

Fixed-income management stresses stability of income from high-quality bonds with minimal exposure to the long market and gradual maturity restructuring over the business cycle.

The asset mix Jan. 1 was 95% stocks, 3% bonds and 2% cash.

The firm is a wholly owned subsidiary of The Pioneer Group Inc.

David Tripple, vice president, is chief investment officer. Sherman Russ, vice president, is client contact.

Pittsburgh National Bank

Fifth & Wood Streets, Pittsburgh, Pa. 15265; (412) 355-4845

Total assets managed	$4,973,000,000
Tax-exempt assets managed:	
Total	$2,927,000,000
Commingled accounts	$142,000,000
Separate accounts	$2,785,000,000
401(k) and 457 assets managed	$140,000,000
Passive assets managed	$316,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	1,112
Separate	240
Types of accounts managed	CEPGJ
No. of portfolio managers	6
Size of research staff	6

Pittsburgh National Bank offers equity, fixed and balanced capabilities.

In equities, two quantitative portfolios are offered: a large-cap core fund using a disciplined buy/sell strategy, and a high-beta, small-cap fund providing no downside risk.

The active bond approach buys and holds high-quality, current coupon issues with intermediate maturities. It also offers dedicated and immunized portfolios.

As of Jan. 1, the tax-exempt asset mix was 42% stocks, 52% bonds and 6% cash.

Clients include Westinghouse Electric, Pennsylvania State Teachers, PPG Industries and Midland-Ross.

The bank is affiliated with PNC Financial Corp., which also owns Provident Capital Management.

Nicholas Nilsen, vice president and manager-employee benefits department, is the chief investment officer. Seth A. Wanetik, vice president, is the client contact.

Platner & Associates

924 Turner St., Allentown, Pa. 18102; (215) 821-0160

Total assets managed	$18,000,000
Tax-exempt assets managed	$3,000,000
Minimum separate account	$100,000
Tax-exempt clients	8
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Platner & Associates is an equity manager. Fundamental analysis is the cornerstone of stock selection. Heavy emphasis is placed on asset allocation into various sectors as market conditions and psychological attitudes change.

The fixed-income approach emphasizes high quality with maturities not to exceed 10 years.

Options are used.

The asset mix Jan. 1 was 65% stocks, 25% bonds, 5% cash, 2% real estate and 3% international.

Robert F. Platner, general partner, is chief investment officer and client contact.

PM Capital Advisors

700 Newport Center Drive, Newport Beach, Calif. 92660; (714) 640-3030

Total assets managed	$3,104,000,000
Tax-exempt assets managed:	
Total	$3,104,000,000
Pooled accounts	$224,000,000
Separate accounts	$30,000,000
CIGs	$282,000,000
Annuities	$211,000,000
Other	$1,477,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	226
Types of accounts managed	CGJ
No. of portfolio managers	6
Size of research staff	5

PM Capital Advisors offers equity, fixed-income and balanced capabilities.

The equity strategy emphasizes high-quality, large-cap companies with consistent above-average earnings growth selling at the low end of their relative p/e range.

In fixed income, managers adjust portfolio maturities and sectors to obtain optimal performance from anticipated changes in interest rate levels and changes in the yield curve and yield spreads.

The tax-exempt asset mix Jan. 1 was 29% stocks, 31% bonds, 30% cash and 10% mortgage-backed securities.

Clients include Albertson's, Clevepak, McDonald's and Walt Disney Productions.

The firm is a subunit in the pension department of Pacific Mutual Life Insurance Co. and also is affiliated with Pacific Investment Management Corp.

Chief investment officer is O.H. Thompson II, executive vice president. Client contact is Robert E. Southard, managing director.

PM Portfolio Management

Friedrichstrasse 9, 8000 Munich 40, West Germany; (89) 33 20 36

Total assets managed	$116,000,000
Tax-exempt assets managed	$79,000,000
International assets managed	$59,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	3

PM Portfolio Management GmbH is an equity and international manager specializing in European small company funds.

The equities approach combines growth stock, emerging growth and market-timing strategies based on in-depth consideration of the global economic environment and its impact.

The asset mix Jan. 1 was 90% stocks, 3% bonds and 7% cash.

IBM is one of the firm's clients.

Walter Kames, board director, is chief investment officer. Friedhelm Pott, board director, is client contact.

PMRealty Advisors Inc.

700 Newport Center Drive, Newport Beach, Calif. 92660; (714) 640-3000

Total assets managed	$359,000,000
Tax-exempt assets managed	$117,000,000
Real estate assets managed	$68,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	10
Types of accounts managed	CGJ
No. of portfolio managers	33

PMRealty Advisors Inc. is a real estate manager.

Managers use a top-down approach to acquire medium-size/multitenant retail, industrial and office building properties within the high-growth corridors of major metropolitan areas.

The Jan. 1 tax-exempt asset mix was 97% equity real estate and 3% cash.

Clients include Air Products and Chemicals, Boise Cascade, Cincinnati Bell and Seattle.

The firm is a subsidiary of Pacific Mutual Life Insurance Co.

Carl A. Mayer Jr., managing director, is chief investment officer. Pete Hammer, managing director, is client contact.

Portfolio Capital Management Inc.

2 Fairview Plaza, Suite 610, 5950 Fairview Road, Charlotte, N.C. 28210; (704) 552-0073

Total assets managed	$134,000,000
Tax-exempt assets managed	$76,000,000
Minimum separate account	$500,000
Tax-exempt clients	2
Types of accounts managed	CEFJ
No. of portfolio managers	2

Portfolio Capital Management Inc. is an equity and balanced manager.

In equities, the firm uses a proprietary computer-based model to identify stocks. It analyzes growth rates, base earnings, financial quality and alternative opportunities in bonds.

Fixed-income portfolios are passive,

attempting to reduce volatility and provide a stable flow of income.

The Jan. 1 tax-exempt asset mix was 40% stocks, 55% bonds and 5% cash.

R. Hatten Hodges Jr., chairman, is chief investment officer and client contact.

The Portfolio Group

30 Rockefeller Plaza, New York, N.Y. 10112; (212) 621-2370

Total assets managed	$1,800,000,000
Tax-exempt assets managed	$240,000,000
Minimum separate account	$300,000
Tax-exempt clients	201
Types of accounts managed	CEF
No. of portfolio managers	14
Size of research staff	4

The Portfolio Group is an equity, fixed-income and balanced manager.

It takes a bottom-up stock approach emphasizing high return on invested capital and market level p/e. Quantitative analysis is used. The fixed-income approach uses a current coupon duration-matching method based on the Shearson Lehman Government/Corporate bond index and supplemented by opportunistic trading.

The Jan. 1 tax-exempt asset mix was 50% stocks, 40% bonds and 10% cash.

The firm is a wholly owned subsidiary of Chemical New York Corp.

Stephen B. Timbers, executive vice president, is chief investment officer. James M. O'Donnell, senior vice president and director of sales, is client contact.

Portfolio Timing Inc.

402 Rainier Bank Building, Tacoma, Wash. 98402; (206) 383-1676

Total assets managed	$8,000,000
Tax-exempt assets managed	$6,000,000
Minimum separate account	$35,000
Tax-exempt clients	68
Types of accounts managed	CEF
No. of portfolio managers	1

Portfolio Timing Inc. is a market timing equity and fixed-income manager. It uses proprietary formulas to move client assets between no-load mutual funds and money market funds.

The Jan. 1 tax-exempt asset mix was 75% stocks and 25% bonds.

Clients include J.D. English Steel, Parametrix, Tucci and Sons and Kentucky Fried Chicken of Tacoma.

Carl J. Kludt, president and portfolio manager, is chief investment officer. Les Cathersal, vice president-marketing, is client contact.

Potomac Asset Management

5247 Wisconsin Ave. N.W., No. 5, Washington, D.C. 20015; (202) 364-6900

Total assets managed	$247,000,000
Tax-exempt assets managed	$235,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	16
Types of accounts managed	CEFGJ
No. of portfolio managers	3
Size of research staff	1

Potomac Asset Management Inc. is a risk-averse equity manager investing in growth and special situations.

Its fixed-income approach is passive and tries to capture major trends in interest rates instead of engaging in short-term trading moves.

The Jan. 1 tax-exempt asset mix was 77% stocks, 20% bonds and 3% cash.

Clients include Dynalectron, D.C. Retirement and American University endowment.

Peter Ladd Gilsey, president, is chief investment officer. Howard Tucker is client contact.

Rowe Price-Fleming International Inc.

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2141

Total assets managed	$1,570,000,000
Tax-exempt assets managed	$1,382,000,000
International assets managed	$1,382,000,000
401(k) and 457 assets managed	$150,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	19
Types of accounts managed	CEFG
No. of portfolio managers	6
Size of research staff	57

Rowe Price-Fleming International Inc. is an international manager. The firm uses a top-down/bottom-up approach for equity investments with asset, currency and country selection being key components.

It uses fixed-income securities based on the opportunistic prospects for total return relative to equity investments.

The mix of tax-exempt assets Jan. 1 was 93% stocks, 2% bonds and 5% cash.

Ninety-five percent of research is generated internally, with 1,500 stocks followed closely and 2,500, generally.

Clients include GM, IBM, GTE and The Common Fund.

Chief investment officer is Martin G. Wade, president. Client contacts are Philippa B. Grant and George A. Murnaghan, vice presidents.

T. Rowe Price Associates

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2000

Total assets managed	$18,200,000,000
Tax-exempt assets managed	$7,375,000,000
Real estate assets managed	$53,000,000
401(k) and 457 assets managed	$227,000,000
Passive assets managed	$125,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	160
Types of accounts managed	CEFGJ
No. of portfolio managers	16
Size of research staff	34

T. Rowe Price Associates Inc. is an equity, fixed-income, balanced and real estate manager.

The equity approach emphasizes established and emerging growth investing. Fundamental research helps identify trends and companies possessing favorable prospects for above-average growth in earnings and dividends. Options are used.

In fixed income, the firm maintains a defensive posture to provide stability. Sector trades, credit, value and interest rate analysis are emphasized.

Its real estate philosophy calls for investing in high-quality, income-producing properties on an unleveraged basis.

The Jan. 1 tax-exempt asset mix was 44% stocks, 40% bonds, 13% cash, 1% equity real estate, 1% mortgage-backed securities and 1% venture capital.

Managers follow 250 stocks closely and 350, generally; about 90% of research is generated internally.

Charles H. Salisbury Jr., vice president and director, is client contact.

PRIMCO Capital Management Inc.

535 Brown & Williamson Tower, Louisville, Ky. 40202; (502) 589-2011

Total assets managed	$908,000,000
Tax-exempt assets managed	$908,000,000
401(k) and 457 assets managed	$420,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	15
Types of accounts managed	CEFGJ
No. of portfolio managers	3
Size of research staff	2

PRIMCO Capital Management Inc. is a fixed-income manager using GIC portfolio management techniques. Emphasis is on credit analysis through dynamic proprietary examination, diversification and identification of market/sector inefficiencies.

As of Jan. 1, all assets were in GICs.

Clients include Southern New England Telephone, Homestake Mining, Dow Jones and Scott Paper.

The firm is owned by INVESCO Capital Management Inc.

Vernon S. Hodge, principal, is chief investment officer. John J. Monahan, principal, is client contact.

Princeton Asset Management Co.

145 Witherspoon St., Princeton, N.J. 08542; (609) 924-6070

Total assets managed	$35,000,000
Tax-exempt assets managed	$11,000,000
International assets managed	$500,000
Minimum separate account	$250,000
Tax-exempt clients	2
Types of accounts managed	CF
No. of portfolio managers	1

Princeton Asset Management Co. is a balanced manager.

In equities, managers combine low p/e and Graham & Dodd methods. The fixed-income approach uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 50% stocks, 40% bonds and 10%

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1200 First Union Plaza, CMG 16 Charlotte, NC 28288

*Based on Risk Return Performance Comparisons report issued by Frank Russell Company for Investment Advisor Separate Accounts and Balanced Separate Accounts for five years ending 12/31/85. Universe includes over 120 portfolios.

cash.

Thirty stocks are followed closely and 100, generally.

William Primm, president, is chief investment officer. John L. Loeb Jr., chairman, is client contact.

Professional Asset Management Inc.

3 Corporate Square, Suite 325, Atlanta, Ga. 30329; (404) 320-1666

Total assets managed	$49,000,000
Tax-exempt assets managed	$24,000,000
Minimum separate account	$250,000
Tax-exempt clients	55
Types of accounts managed	CF
No. of portfolio managers	1
Size of research staff	1

Professional Asset Management Inc. is an equity manager.

The firm invests when the value of the shares does not reflect the worth of the company and the reason for the undervaluation is understood.

Sector analysis is used in fixed-income; funds are managed without regard to interest rates except at market extremes.

The Jan. 1 tax-exempt asset mix was 65% stocks, 15% bonds and 20% cash.

Marc Heilweil, president, is chief investment officer. Brenda Dorrien, administrative vice president, is client contact.

Property Capital Associates

200 Clarendon St., Boston, Mass. 02116; (617) 536-8600

Total assets managed	$380,000,000
Tax-exempt assets managed	$330,000,000
Real estate assets managed	$330,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	50
Types of accounts managed	CEFG

Property Capital Associates is a real estate manager investing nationwide in major income-producing properties. Investments are structured as participating debt/equity with high initial cash returns and strong inflation protection.

As of Jan. 1, all assets were in equity real estate.

Clients include Harvard University, The World Bank, Rockefeller Foundation and Howard Hughes Medical institute.

Anthony D. Fox, senior vice president, is chief investment officer. Robert M. Armstrong, senior vice president, is client contact.

Pensions & Investment Age will publish its annual ranking and profiles of real estate investment advisers in the Sept. 15 issue.

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The Providence Group Investment Advisory Co.

500 Turks Head Building, Providence, R.I. 02903; (401) 331-6250

Total assets managed	$125,000,000
Tax-exempt assets managed	$37,000,000
Minimum separate account	$200,000
Tax-exempt clients	70
Types of accounts managed	C
No. of portfolio managers	4

The Providence Group Investment Advisory Co. is a balanced manager.

In equities, the firm stresses stocks of companies that dominate their industry or are gaining industry market share, leading managers primarily to growth stocks.

In fixed income, bond selection stresses minimum volatility and risk with a high level of stable income. This approach leads managers to high-quality, short- to intermediate-term bonds.

The Jan. 1 tax-exempt asset mix was 20% stocks, 76% bonds and 4% cash.

Robert F. Hall and Robert E. Washburn, principals, are chief investment officers. Josephine H. Carlos is client contact.

Provident Capital Management

30 S. 17th St., Philadelphia, Pa. 19103; (215) 561-6000

Total assets managed	$2,587,000,000
Tax-exempt assets managed	$2,587,000,000
International assets managed	$13,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	65
Types of accounts managed	CEG
No. of portfolio managers	9

Provident Capital Management is an equity, fixed-income, balanced and international manager.

Its bottom-up equity approach is both team and rules oriented. Value is emphasized.

The fixed-income approach uses sector analysis with interest rates driving duration.

The Jan. 1 mix of tax-exempt assets was 80% stocks, 7% bonds and 13% cash.

In 1985, the firm realized a $588.4 million net gain in new tax-exempt business; 11 clients were added.

Clients include Pennsylvania State Employees, Westinghouse, California State Teachers and National Football League Players' Association.

Managers follow 50 stocks closely and 200, generally; 70% of research is generated internally.

The firm is a wholly owned subsidiary of PNC Financial Corp.

W. Anthony Hitschler, president, is chief investment officer. Andrew Sheffler, director of marketing and client relations, is client contact.

Provident Investment Counsel

225 S. Lake Ave., Pasadena, Calif. 91101; (818) 449-8500

Total assets managed	$1,406,000,000
Tax-exempt assets managed	$1,355,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	40
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	4

Provident Investment Counsel is primarily an equity manager, with balanced and fixed-income capabilities.

Its equity approach emphasizes growth stock and emerging growth securities and its fixed-income approach, interest rate anticipation.

Stock index futures are used.

The Jan. 1 tax-exempt asset mix was 89% stocks, 6% bonds and 5% cash.

Managers follow 60 stocks closely and 150, generally; 70% of research is conducted in-house.

Clients include Kansas Public Employees, GTE, International Paper and Chevron.

Robert M. Kommerstad, chairman, is chief investment officer. Jeffrey J. Miller, executive vice president, is client contact.

Provident National Assurance Co.

Fountain Square, Chattanooga, Tenn. 37402; (615) 755-1924

Total assets managed	$2,700,000,000
Tax-exempt assets managed:	
Total	$2,677,000,000
Pooled accounts	$68,000,000
401(k) and 457 assets managed	$1,250,000,000
GICs	$2,097,000,000
Annuities	$250,000,000
Other	$253,000,000
Types of accounts managed	CEFG
No. of portfolio managers	3
Size of research staff	6

Provident National Assurance Co. is an equity and fixed-income manager.

The equity approach includes a combination of quantitative screening and fundamental, Graham & Dodd analysis.

The emphasis in fixed income is on credit analysis, market sector value and economic outlook.

The asset mix Jan. 1 was 69.3% stocks and 30.7% bonds.

Clients include System Control and Coca-Cola.

Chief investment officer is John H. Van Wickler, senior vice president and treasurer. Client contact is Win Profio, vice president-sales and marketing.

Prudential Asset Management Group

19 Prudential Plaza, Newark, N.J. 07101; (201) 877-9298

Total assets managed	$43,968,000,000
Tax-exempt assets managed:	
Total	$43,968,000,000
Pooled accounts	$12,940,000,000
Separate accounts	$7,899,000,000
Real estate assets managed	$6,038,000,000
International assets managed	$487,000,000
GICs	$7,327,000,000
Annuities	$11,237,000,000
Other	$4,565,000,000
Indexed/passive assets	$3,942,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	500
Types of accounts managed	CEFGJ
No. of portfolio managers	43
Size of research staff	22

The Prudential Asset Management Group offers equity, fixed-income, balanced, real estate, international and venture capital capabilities through its separately managed investment units.

The tax-exempt asset mix Jan. 1 was 26.5% stocks, 39.1% bonds, 3.7% cash, 27.7% equity real estate and 1% mortgages.

Clients include Sony, AT&T, Illinois Municipal Retirement System and Los Angeles County Employees.

Garnett L. Keith, vice chairman, is chief investment officer. Robert Bowen, senior vice president, is client contact.

The Prudential Asset Management Group is composed of these units:

- PRIFORM INVESTORS uses a value-oriented, low p/e strategy to manage $2.2 billion in assets.
- MIDCO INVESTORS manages $850 million with a growth-oriented, smaller-cap investment strategy that uses risk-minimizing techniques.
- CONTRA-TREND INVESTMENT COUNSEL uses a contrarian strategy to manage about $500 million.
- MATRIX CAPITAL MANAGEMENT, profiled elsewhere in this issue, manages $255 million.
- EAGLE ROCK ASSET MANAGEMENT manages $500 million in domestic and foreign stock index and active "core" portfolios.
- PRUDENTIAL FIXED INCOME ADVISORS manages more than $6 billion in dedicated and immunized portfolios, laddered maturity portfolios, high-yield bond portfolios and bond index funds.
- THE PRUDENTIAL REALTY GROUP manages $6 billion in real estate investments that include a diversified, open-end portfolio, a series of closed-end funds, participating mortgages on income-producing properties, and individual client accounts invested in a single property or a limited number of properties.
- THE PENSION ASSET MANAGEMENT GROUP provides asset allocation services and discretionary portfolio management for $6.5 billion of pension client assets.
- THE PRUDENTIAL VENTURE CAPITAL MANAGEMENT CO. invests $250 million in direct and partnership venture funding.
- PCM INTERNATIONAL, profiled elsewhere in this issue, manages assets of $426 million in global and international stock and bond portfolios.
- MERCATOR ASSET MANAGEMENT, profiled elsewhere in this issue, manages $77 million using global and international stock strategies.
- THE PRUDENTIAL INSURANCE CO. OF AMERICA manages $23 billion in guaranteed investments for pension and savings plans and other institutional accounts.

Jennison Associates Capital, profiled in this issue, is an affiliate.

Prudential Assurance Co. Ltd., Pension Fund Management

Suite 300, 141 Adelaide St. W., Toronto, Ontario M5H 3L9; (416) 362-4441

Total assets managed	$1,950,000,000(U.S.)
Tax-exempt assets managed:	
Total	$325,000,000
For subsidiaries of U.S. firms	$40,000,000
International assets managed	$35,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	78
U.S. subsidiaries	9
Types of accounts managed	C
No. of portfolio managers	7

The Prudential Assurance Co. Ltd. offers equity, fixed-income, balanced and real estate accounts.

In equities, the firm is an active trader and takes a fundamental approach to selection, concentrating on marketable Canadian stocks and weighting industries against index subgroups.

U.S. stock portfolio construction and activity are heavily dependent on quantitative analysis.

In fixed income, managers concentrate on high-quality marketable bonds. The average term is aggressively managed to reflect business and interest rate expectations.

In real estate, the firm is syndicating ownership in individual properties in major Canadian city centers to pension funds.

The Jan. 1 asset mix was 40% Canadian stocks, 40% bonds, 10% cash and 10% U.S. stocks.

M.A.P. Beck is chief investment officer. K. Kukkonen, manager-pension sales, is client contact.

Prudential Bache Investment Advisory Service

199 Water St., New York, N.Y. 10292; (212) 214-1411

Total assets managed	$6,000,000,000
Tax-exempt assets managed	$150,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	7
Types of accounts managed	CFG
No. of portfolio managers	10

Prudential Bache Investment Advisory Service is a fee-based, near-term, fixed-income advisory service, providing yield curve and market analysis and portfolio direction.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 10% bonds and 90% cash.

The firm is an independent subsidiary of the Prudential Insurance Co. of America.

Margaret Kelleher, vice president and manager, is chief investment officer and client contact.

PSM Investors Inc.

121 Judy Farm Road, Carlisle, Mass. 01741; (617) 369-0033

Total assets managed	$95,000,000
Tax-exempt assets managed	$20,000,000
401(k) and 457 assets managed	$76,000,000
Minimum separate account	$25,000
Tax-exempt clients	25
Types of accounts managed	CE
No. of portfolio managers	1
Size of research staff	1

PSM Investors Inc. is an equity manager, switching between mutual funds and money market funds as stock market conditions change.

As of Jan. 1, all tax-exempt assets were in equities.

Clients include CDA Pension Plan, American Baby Inc., Architectural Resources and Copeland Cos.

Stan Lipstadt, president, is chief investment officer and client contact.

Public Storage Inc.

1015 Grandview Ave., Glendale, Calif. 91201; (818) 244-8080

Total assets managed	$2,000,000,000
Tax-exempt assets managed	$1,200,000,000
Real estate assets managed	$250,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	90
Types of accounts managed	CEFGJ
No. of portfolio managers	12

Public Storage Inc. is a real estate manager that acquires commercial and high-grade industrial sites and develops, on an all-cash basis, self-storage facilities and business parks.

As of Jan. 1, all tax-exempt assets were in real estate.

Clients include Ameritech, Connecticut, Eastern Air Lines Pilots and San Diego County.

PSI Securities Corp. is an affiliate.

Hugh Horne, president-real estate acquisition group, is chief investment officer. Nori Gerardo, senior vice president-PSI Institutional Realty, is client contact.

Puget Sound National Bank

1119 Pacific Ave., P.O. Box 1258, Tacoma, Wash. 98401; (206) 383-2867

Total assets managed	$185,000,000
Tax-exempt assets managed:	
Total	$12,000,000
Commingled accounts	$10,000,000
Separate accounts	$2,000,000
International assets managed	$348,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$250,000
Tax-exempt clients:	
Commingled	36
Separate	5
Types of accounts managed	CFG
No. of portfolio managers	3
Size of research staff	4

Puget Sound National Bank is a balanced manager.

Its top-down equity approach sets an economic outlook and weights specific sectors accordingly.

In fixed income, managers invest in high-quality, short- to intermediate-term instruments. The specific strategy depends on the level of interest rates.

The Jan. 1 tax-exempt asset mix was 60% equities and 40% bonds.

Stephen A. Finnigan, vice president, is chief investment officer. Eric N. Quist, assistant vice president, is client contact.

James Punderson & Co. Inc.

109 Central Ave., Island Heights, N.J. 08732; (201) 929-1485

Total assets managed	$12,000,000
Tax-exempt assets managed	$2,000,000
Minimum separate account	$20,000
Tax-exempt clients	18
Types of accounts managed	C
No. of portfolio managers	1

James Punderson & Co. Inc. is a fixed-income manager using special situation "junk bonds."

The Jan. 1 tax-exempt asset mix was 95% bonds and 5% cash.

James M. Punderson IV, president, is chief investment officer. George A. Orsi, vice president, is client contact.

Putnam Advisory Co.

1 Post Office Square, Boston, Mass. 02109; (617) 292-1200

Total assets managed	$7,037,000,000
Tax-exempt assets managed	$5,697,000,000
401(k) and 457 assets managed	$70,000,000
International assets managed	368,000,000

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JOHNSON & RANKIN ASSOCIATES INC.
100 W. Monroe St.
Suite 2011
Chicago, IL 60603
(312) 372-0125

Passive assets managed	$812,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	106
Types of accounts managed	CEFGJ
No. of portfolio managers	29
Size of research staff	26

Putnam Advisory Co. is an equity, fixed-income, balanced and international manager.

In equities, the firm seeks to identify sectors and companies with above-average earnings prospects. It also looks for opportunities in which fundamental changes indicate accelerating future earnings growth.

In fixed income, quantitative and strategic bond management is used with emphasis on protection of principal, assurance of a high, stable income stream and long-term impact of reinvestment.

The Jan. 1 tax-exempt asset mix was 45% stocks, 44% bonds and 11% cash.

Managers follow 450 stocks closely and 500, generally; 70% of research is generated internally.

The firm is a subsidiary of the Putnam Cos. Inc., which is wholly owned by Marsh & McLennan Cos. Inc.

Thomas M. O'Neill, Charles E. Porter, Alan J. Bankart and Walter Oechsle are chief investment officers. Greg S. Reid, senior vice president, is client contact.

q

QCI

46 Prince St., Rochester, N.Y. 14607; (716) 461-9130

Total assets managed	$150,000,000
Tax-exempt assets managed	$80,000,000
Real estate assets managed	$3,000,000
401(k) and 457 assets managed	$2,000,000
Minimum separate account	$300,000
Tax-exempt clients	100
Types of accounts managed	CE
No. of portfolio managers	4

QCI is a fixed-income and balanced manager. In equity, it takes a conservative, top-down approach, selecting undervalued industries within which specific stocks are selected.

In fixed income, its top-down approach is used to develop the interest rate scenario and sector analysis.

The mix of tax-exempt assets Jan. 1 was 20% stocks, 60% bonds, 18% cash and 2% equity real estate.

Chief investment officer is Fred C. Gregory, president. Client contact is Norman C. Hughes, chairman.

Qualivest Capital Management Inc.

P.O. Box 2758, Portland, Ore. 97208; (503) 225-6806

Total assets managed	$1,904,000,000
Tax-exempt assets managed	$327,000,000
401(k) and 457 assets managed	$31,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	23
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	1

Qualivest Capital Management Inc. is an equity and balanced manager.

The firm uses three non-covariant investment styles in each equity portfolio. Its bottom-up approach emphasizes stock selection among value, growth and cyclical stocks.

In fixed income, it creates low-risk bond portfolios by diversifying across maturities and emphasizing quality. Interest rate anticipation is used.

The Jan. 1 mix of tax-exempt assets was 52% stocks, 38% bonds and 10% cash.

Clients include Willamette University, Northwest Iron Workers and Ornark Industries.

Qualivest Capital Management Inc. is a wholly owned subsidiary of U.S. Bancorp.

Chief investment officer is Gary K. Swietzer. Client contact is Kim McCarrel, account manager.

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

Quest Advisory Corp.

1414 Avenue of the Americas, New York, N.Y. 10019; (212) 486-1445

Total assets managed	$450,000,000
Tax-exempt assets managed	$200,000,000
Tax-exempt clients	10
Types of accounts managed	CEFG
No. of portfolio managers	2
Size of research staff	2

Quest Advisory Corp. is an equity manager that relies on Graham & Dodd. The firm uses a fundamental analytical approach that emphasizes balance sheet and return review concentrating on small companies.

The Jan. 1 tax-exempt asset mix was 80% stocks and 20% cash.

Seventy-five percent of research is generated internally, with 50 stocks followed closely and 500, generally.

Clients include Oregon, Safeway, World Bank and Xerox.

Chief investment officer is Charles M. Royce, president. Client contact is Thomas R. Ebright, vice president.

r

RAC Advisors Inc.

4000 Town Center, Suite 101, Southfield, Mich. 48075; (313) 358-2282

Total assets managed	$6,000,000
Tax-exempt assets managed	$5,000,000
Minimum separate account	$50,000
Tax-exempt clients	3
Types of accounts managed	CF
No. of portfolio managers	1
Size of research staff	1

RAC Advisors Inc. is a balanced manager. Its equity approach uses a low-risk, high-potential valuation method with an emphasis on Graham & Dodd.

Its fixed-income approach is passive.

The Jan. 1 tax-exempt asset mix was 40% stocks, 45% bonds and 15% cash.

RAC Advisors Inc. is a wholly owned subsidiary of Rodecker & Co. investment brokers.

Chief investment officer and client contact is Arthur D. Rodecker.

Rainier National Bank

P.O. Box 3966, Seattle, Wash. 98124; (206) 621-4387

Total assets managed	$1,801,080,000
Tax-exempt assets managed:	
Total	$963,000,000
Commingled accounts	$327,000,000
Separate accounts	$636,000,000
Real estate assets managed	$49,000,000
401(k) and 457 assets managed	$86,000,000
Passive assets managed	$13,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	670
Types of accounts managed	CEFGJ
No. of portfolio managers	12
Size of research staff	4

Rainier National Bank is an equity, fixed-income, balanced and real estate manager.

Its equity approach uses growth stocks. Its fixed-income approach uses interest rate anticipation. In real estate, managers emphasize quality properties in strong growth areas and diversification of investments in geographic and occupancy type.

The Jan. 1 tax-exempt asset mix was 35% stocks, 55% bonds, 3% equity real estate, 2% mortgages and 5% miscellaneous.

Managers follow 210 stocks closely; 5% of research is conducted in-house.

H. James Darsey, vice president and manager, is chief investment officer. Ben Fletcher, vice president and manager, is client contact.

Rampart Investment Management Co. Inc.

Exchange Place, Suite 2800, Boston, Mass. 02109; (617) 742-7400

Total assets managed	$495,000,00
Tax-exempt assets managed	$363,000,00

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Client Assets Committed—over $300,000,000
($200,000,000 managed currently)

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An affiliate of The Prudential

Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts managed	CEG
No. of portfolio managers	5
Size of research staff	3

Rampart Investment Management Co. Inc. is an options and futures manager with an equity approach that relies on low volatility, consistent growth stocks.

The firm's fixed-income approach is based on interest rate anticipation with technical and fundamental analysis.

Sixty-five percent of research is generated internally, with 250 stocks followed closely and 400, generally.

Chief investment officer is Ronald M. Egalka, president. Client contact is David R. Fraley, managing director.

Reams Asset Management

P.O. Box 666, Columbus, Ind. 47202; (812) 372-6066

Total assets managed	$870,000,000
Tax-exempt assets managed	$720,000,000
International assets managed	$90,000,000
401(k) and 457 assets managed	$25,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	4

Reams Asset Management Co. Inc. is a balanced manager whose equity approach is low p/e based. It uses a bottom-up, value-oriented approach, with portfolios usually fully invested and a general avoidance of market-timing strategies.

Fixed-income portfolios are structured to anticipate the business and interest rate cycles and secular economic trends. Heavy emphasis is placed on credit analysis and relative valuation.

The Jan. 1 tax-exempt asset mix was 60% stocks and 40% bonds.

One hundred stocks are followed closely and 300, generally.

Chief investment officer and client contact is Fred W. Reams, president.

W.H. Reaves & Co. Inc.

30 Montgomery St., Jersey City, N.J. 07302; (212) 422-1433

Total assets managed	$410,000,000
Tax-exempt assets managed	$410,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	22
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	4

W.H. Reaves & Co. Inc. is an equity manager, whose fundamental value approach is limited to common stocks in the utility industries, with active opportunistic management of accounts.

The mix of tax-exempt assets Jan. 1 was 91% stocks and 9% cash.

All research is generated internally with 100 stocks followed closely.

Clients include Allegheny International, Allegheny Ludlum Steel, Transco Energy and Eli Lilly.

Chief investment officer and client contact is William H. Reaves, president.

Reed Monahan Nicholishen Investment Counsel Inc.

20 Victoria St., Toronto, Ontario M5C 2N8; (416) 365-0038

Total assets managed	$325,000,000(U.S.)
Tax-exempt assets managed:	
Total	$325,000,000
For subsidiaries of U.S. firms	$183,000,000
International assets managed	$13,000,000
Minimum separate account	$10,000,000
Tax-exempt clients:	
Total	21
U.S. subsidiaries	10
Types of accounts managed	CEFP
No. of portfolio managers	3

Reed Monahan Nicholishen Investment Counsel Inc., a Canadian firm, is a balanced manager.

Its equity approach relies on Graham & Dodd analysis and growth stocks. The firm structures a concentrated portfolio using a bottom-up approach.

Its fixed-income approach is active and is based on interest rate forecasts.

The asset mix Jan. 1 was 50% Canadian stocks, 30% bonds, 10% cash and 10% U.S. stocks.

Don Reed, president, is the client contact.

Reich & Tang Inc.

100 Park Ave., New York, N.Y. 10017; (212) 370-1110

Total assets managed	$3,700,000,000
Tax-exempt assets managed	$948,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	29
Types of accounts managed	CEF
No. of portfolio managers	7

Reich & Tang Inc. is an equity manager that looks for companies with earnings growth rates exceeding those of the market and where their valuation is at a discount p/e.

Jan. 1, the mix of tax-exempt assets was 78% stocks, 2% bonds and 20% cash.

Ninety-five percent of research is generated internally, with 75 stocks followed closely and 150, generally.

R.J. Reynolds is a client.

Chief investment officer is Robert F. Hoerle, chairman-capital management group. Client contact is Joseph H. Reich, president.

Reimer & Koger Inc.

8500 W. 63rd St., Shawnee Mission, Kan. 66202; (913) 236-6700

Total assets managed	$953,000,000
Tax-exempt assets managed	$766,000,000
401(k) and 457 assets managed	$10,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	32
Types of accounts managed	CEFGJ
No. of portfolio managers	8

Reimer & Koger Inc. is an equity, fixed-income and balanced manager.

In equities, the firm makes timing decisions. It rotates by themes developed along perceived economic changes. Issues are selected for purchase and sale by quantitatively screening 100 issues on the focus list.

In fixed income, it uses a duration-based discipline for fixed income that seeks higher-than-market returns with market risk or less.

Options, stock index futures and fixed-income futures are used.

As of Jan. 1, the mix of tax-exempt assets was 48.4% stocks, 44.8% bonds and 6.8% cash.

Clients include Kansas, Marion Labs and Grand Rapids.

Ten percent of research is generated internally, with 100 stocks followed closely and 1,000, generally.

Chief investment officer is Ronald C. Reimer, managing director. Client contact is Thomas J. Bash, managing director.

Reiser-Builder Inc.

7 Piedmont Center, Suite 721, Atlanta, Ga. 30305; (404) 233-9341

Total assets managed	$41,000,000
Tax-exempt assets managed	$26,000,000
Minimum separate account	$500,000
Tax-exempt clients	24
Types of accounts managed	CEJ
No. of portfolio managers	2
Size of research staff	2

Reiser-Builder Inc. is an equity and balanced manager.

Its equity approach seeks medium-size growth companies, with emphasis on the Southeast; quantitative analysis is used. Options and stock index futures are used.

Interest rate anticipation is used for fixed income.

As of Jan. 1, the mix of tax-exempt assets was 60% stocks, 30% bonds and 10% cash.

Clients include Daniel International, Equifax, University of Tennessee and John Wieland Homes.

Chief investment officer and client contact is Robert E. Reiser Jr.

Renaissance Investment Management Inc.

3006 Vernon Place, Cincinnati, Ohio 45219; (513) 281-9800

Total assets managed	$495,000,000
Tax-exempt assets managed	$420,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	80
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	1

Renaissance Investment Management Inc. is an equity and balanced manager.

Taking a market-timing approach, it employs a proprietary, computer-based asset allocation decision-making model to determine the relative attractiveness of cash equivalents, bonds and equities.

Large-cap, readily marketable securities are stressed. The fixed-income approach is passive.

All tax-exempt assets were in stocks Jan. 1.

Clients include J.M. Smucker, Kroger, Taft Broadcasting and Cincinnati Bell.

Chief investment officer is Frank W. Terrizzi, managing director. Mr. Terrizzi and S. William Miller, managing director, are client contacts.

RepublicBank Dallas

P.O. Box 241, Dallas, Texas 75221; (214) 922-3593

Total assets managed	$7,534,000,000
Tax-exempt assets managed:	
Total	$5,537,000,000
Commingled accounts	$627,000,000
Separate accounts	$4,910,000,000
Real estate assets managed	$76,000,000
International assets managed	$19,000,000
401(k) and 457 assets managed	$715,000,000
Passive assets managed	$272,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	2,208
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	6

RepublicBank Dallas is an equity, fixed-income, balanced, real estate and international manager with additional capabilities in energy, venture capital, indexed funds and portfolio insurance.

Its equity approach seeks inefficiently priced growth potential stocks based on systematic research.

In fixed income, managers try to take advantage of market inefficiencies using high-yield bonds, sector selection, credit research and swapping.

Stock index futures and fixed-income futures are used.

In real estate, it concentrates on properties with long-term growth and stability, diversifying by property.

The Jan. 1 tax-exempt asset mix was 48% stocks, 42% bonds, 7% cash and 1.6% equity real estate, 0.2% mortgages, 0.7% mortgage-backed securities and 0.5% international equity.

Managers follow 250 stocks closely and 5,000, generally; 75% of research is generated internally.

Clients include American Airlines, Ford, Texas Instruments and Tenneco.

H. Edward Anderson, senior vice president, is chief investment officer. Client contacts are David J. Pittman, senior vice president and director-trust corporate services, and Vida S. Icenogle, vice president and director-investment marketing.

Republic National Bank of New York

Investment Department, 452 Fifth Ave., New York, N.Y. 10018; (212) 930-6264

Total assets managed	$300,000,000
Tax-exempt assets managed:	
Total	$150,000,000
Commingled accounts	$10,000,000
Separate accounts	$140,000,000
Minimum separate account	$500,000
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	1

Republic National Bank of New York is an equity, fixed-income and balanced manager.

Its actively managed, multifund portfolios consist of 10 to 15 mutual funds selected to meet client objectives and to reflect changing market conditions.

The Jan. 1 tax-exempt asset mix was 50% stocks, 45% bonds and 5% cash.

Forty percent of research is generated internally.

Michael D. Hirsch is chief investment officer. Adrienne S. Doobin, investment officer, is client contact.

Research Associates Management Corp.

950 Third Ave., New York, N.Y. 10022; (212) 308-9331

Total assets managed	$102,000,000
Tax-exempt assets managed	$54,000,000
Minimum separate account	$500,000
Tax-exempt clients	42
Types of accounts managed	C
No. of portfolio managers	3

Research Associates Management Corp., an equity manager, uses relative value as the foundation of its investment philosophy. By identifying changing market trends, it rotates assets into areas expected to be most rewarding, or defensively into notes or cash.

Relying on interest rate anticipation for fixed income, it purchases U.S. government notes of less than 10 years' maturity.

As of Jan. 1, the mix of tax-exempt assets was 62.5% stocks, 36.5% bonds and 1% cash.

Chief investment officer is Alfred G. Parmelee, executive vice president. Client contact is John W. Mettler III, president.

Retirement System for Savings Institutions

41 E. 42nd St., New York, N.Y. 10017; (212) 867-8950

Total assets managed	$538,000,000
Tax-exempt assets managed	$538,000,000
Real estate assets managed	$34,000,000
International assets managed	$22,000,000
401(k) and 457 assets managed	$4,000,000
Passive assets managed	$27,000,000
Tax-exempt clients	107
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	3

Retirement System for Savings Institutions is a balanced manager taking a multifaceted, diversified approach to equities, with individual funds for core value, growth and international.

The firm's fixed-income approach is diversified, and includes both internal and external management of short- and intermediate-term, active and dedicated funds. Mortgage-backed securities are used when spreads are attractive.

The asset mix Jan. 1 was 36.4% stocks, 38.2% bonds, 17.7% cash, 0.2% mortgages, 6% mortgage-backed securities and 1.5% accrued income received.

Dedicated or immunized bond portfolios account for $27 million.

Clients include Dollar Dry Dock Savings Bank, CrossLand Savings, American Savings Bank and Lincoln Savings Bank.

James J. Coughlin, vice president-investment, is chief investment officer. Edward J. Kowatch, president, is client contact.

Rice, Hall, James & Associates

1200 Third Ave., Suite 1600, San Diego, Calif. 92101; (619) 239-9005

Total assets managed	$550,000,000
Tax-exempt assets managed	$385,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	50
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	3

Rice, Hall, James & Associates is an equity manager. The firm attempts to identify unrecognized values with high-quality earnings and strong balance sheets. It emphasizes long-term fundamental value with good potential for earnings and dividend growth.

A protective fixed-income approach emphasizes the use of short and intermediate Treasuries.

The mix of tax-exempt assets Jan. 1 was 75% stocks, 15% bonds and 10% cash.

Twenty-five percent of research is generated internally, with 100 stocks followed closely and 200, generally.

Chief investment officer is Louis E. Rice, president. Client contact is Walter H. Beck, senior vice president.

Pensions & Investment Age reports on changes and trends in the management of small and medium-sized pension funds in the May 26 issue.

T.W. Richardson & Co.

100 Pine St., Suite 1275, San Francisco, Calif. 94111; (415) 391-2660

Total assets managed	$10,00
Tax-exempt assets managed	$10,00
Real estate assets managed	$10,00
Minimum separate account	$5,00
Tax-exempt clients	
Types of accounts managed	
No. of portfolio managers	

T.W. Richardson & Co., a real es manager, invests in land and lea unleased industrial and suburl office buildings. It emphasizes reha tation, intense management and c centrated market timing.

All tax-exempt assets Jan. 1 wer equity real estate.

Chief investment officer and cl contact is Thomas W. Richardson.

The Riggs National Bank o Washington D.C.

P.O. Box 1149, 1120 Vermont Ave. N.W., Washington, D.C. 20013; (202) 835-6787

Total assets managed	$2,000,00
Tax-exempt assets managed:	
Total	$525,00
Commingled accounts	$86,00
Separate accounts	$439,00
Real estate assets managed	$40
International assets managed	$6,00
401(k) and 457 assets managed	$4,00
Minimum separate account	$1,00
Tax-exempt clients:	
Commingled	
Separate	
Types of accounts managed	
No. of portfolio managers	
Size of research staff	

The Riggs National Bank of Wa ington, D.C., is an equity, fixed-inco and balanced manager.

In equities, managers generally fully invested, rotating among sec using low p/e stocks.

In fixed income, the bank uses s tor analysis and acts as a bond str gist.

The Jan. 1 tax-exempt asset was 45% stocks, 45% bonds, 9% c and 1% mortgages.

Managers follow 200 stocks clo and 400, generally; 25% of researc generated internally.

Charles S. Plumb, senior vice pr dent and trust investment officer chief investment officer and client c tact.

RNC Capital Management

11601 Wilshire Blvd., Penthouse Floor, Los Angeles, Calif. 90025; (213) 477-6543

Total assets managed	$525,00
Tax-exempt assets managed	$420,00
Real estate assets managed	$2,00
401(k) and 457 assets managed	$10,00
Minimum separate account	$25
Tax-exempt clients	
Types of accounts managed	C
No. of portfolio managers	

RNC Capital Management Co. is equity, fixed-income, balanced real estate manager.

The firm's equity approach relies sector rotation and Graham & D using only New York and Ameri stock exchange-listed stocks wit bottom-up approach.

In fixed income, the approach based on sector analysis, and investments are convertible.

For real estate, commercial pro ties with low leverage are sought.

The mix of tax-exempt assets Ja was 60% stocks, 30% bonds and 1 cash.

Seventy percent of research is g erated internally, with 80 stocks lowed closely and 200, generally.

Thomas L. Roley, chairman of board, is chief investment offic Robert W. Nichols, president, is cl contact.

Roanoke Asset Manageme

10 E. 53rd St., New York, N.Y. 100 (212) 759-9097

Total assets managed	$480,00
Tax-exempt assets managed	$450,00
Minimum separate account	$5,00
Tax-exempt clients	
Types of accounts managed	C
Portfolio managers	

Roanoke Asset Management is equity manager. It is a bottom-up st

selector focusing on companies undergoing a positive fundamental change. In order to qualify for purchase, a security must have the potential for higher than consensus earnings gains.

The mix of tax-exempt assets Jan. 1 was 90% stocks and 10% cash.

Seventy percent of research is generated internally, with 35 stocks followed closely and 50 to 60, generally.

Clients include Florida Power & Light, Boeing, Ashland Oil and Connecticut.

Chief investment officer is Edwin G. Vroom. Client contact is Martin W. Lynn, vice president.

Robshaw & Cheskin Associates Inc.

69 Delaware Ave., Suite 1201, Buffalo, N.Y. 14202; (716) 845-5050

Total assets managed	$64,000,000
Tax-exempt assets managed	$39,000,000
Minimum separate account	$300,000
Tax-exempt clients	30
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	2

Robshaw & Cheskin Associates Inc. is a balanced manager. The firm's equity investment approach places emphasis on a fundamental search for value among investment alternatives.

Its fixed-income approach is based on an analysis of sectors, ratings and maturities. A strategy is constructed using the yield curve and anticipation shifts in the curve.

The mix of tax-exempt assets Jan. 1 was 70% stock, 20% bonds and 10% cash.

Chief investment officer is Stephen R. Robshaw, president. Client contact is Alan E. Cheskin, vice president.

Rosenberg Capital Management

4 Embarcadero Center, Suite 2900, San Francisco, Calif. 94111; (415) 954-5474

Total assets managed	$6,930,000,000
Tax-exempt assets managed	$6,400,000,000
Real estate assets managed	$540,000,000
Passive assets managed	$50,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	76
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	28

Rosenberg Capital Management is an equity, fixed-income and balanced manager.

Its equity approach is based on growth stock and emerging growth. Interest rate anticipation and sector analysis are used in fixed income.

The mix of tax-exempt assets Jan. 1 was 63% stocks, 21% bonds, 8% cash and 8% mortgage-backed securities.

About 80% of research is generated internally, with 300 stocks followed closely and 1,000, generally.

Clients include Boeing, General Mills, Southern California Edison and Rockefeller Foundation.

Chief investment officer is Claude N. Rosenberg Jr., senior principal. Mr. Rosenberg and Gary W. Schreyer, principal, are client contacts.

Rosenberg Institutional Equity Management

4 Orinda Way, Suite 200E, Orinda, Calif. 94563; (415) 254-6464

Total assets managed	$188,000,000
Tax-exempt assets managed	$188,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	2

Rosenberg Institutional Equity Management identifies undervalued companies through a disciplined, systematic analysis of fundamental data of 3,500 stocks.

Stock index futures are used.

As of Jan. 1, all tax-exempt assets were in stocks.

Ninety-five percent of research is generated internally.

Clients include GTE and Alcoa.

Chief investment officer is Barr Rosenberg, managing general partner. Client contact is Marlis S. Fritz, director of marketing.

Middle-market funds will be spotlighted May 26.

Rothschild Asset Management Inc.

1 Rockefeller Plaza, New York, N.Y. 10020; (212) 757-6000

Total assets managed	$451,000,000
Tax-exempt assets managed	$271,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	26
Types of accounts managed	CEF
No. of portfolio managers	6

Rothschild Asset Management Inc. is an equity and balanced manager.

The firm builds portfolios of stocks whose earnings are anticipated to grow substantially faster than the market but whose p/e multiples are considered to be reasonable.

The firm adjusts fixed-income maturities in accordance with interest rate anticipation. Issuer and quality swapping are also used.

The mix of tax-exempt assets Jan. 1 was 68% stocks, 15% bonds and 17% cash.

Clients include Continental Telecom, Grand Union and Illinois State Board.

Rothschild Asset Management Inc. is a subsidiary of Rothschild Inc.

Robert H. Buckles is president and chief investment officer. Client contact is Carl A. Bafaro, managing director.

The Rothschild Co.

32 South St., Baltimore, Md. 21202; (301) 539-4660

Total assets managed	$790,000,000
Tax-exempt assets managed	$500,000,000
International assets managed	$25,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	66
Types of accounts managed	CEF
No. of portfolio managers	2
Size of research staff	1

The Rothschild Co., an equity manager, employs low p/e, emerging growth and Graham & Dodd principles in its approach. It relies on interest rate anticipation in fixed income.

The mix of tax-exempt assets Jan. 1 was 40% stocks, 5% bonds, 15% cash and 40% convertible securities.

Thirty percent of research is generated internally, with 100 stocks followed closely and 200, generally.

Clients include NADA, Johns Hopkins APL Pension, Dayco and Alton Jones Foundation.

Chief investment officer and client contact is Stanford Z. Rothschild Jr.

N.M. Rothschild International Asset Management Ltd.

New Court, St. Swithin's Lane, London, England EC4P 4DU; (011) 441-280-5000

Total assets managed	$1,300,000,000
Tax-exempt assets managed	$1,175,000,000
International assets managed	$578,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	14
Types of accounts managed	CG
No. of portfolio managers	9

N.M. Rothschild International Asset Management Ltd. is an international manager that bases its equity approach on growth stock. The firm aims to add value in currency, market and stock selection.

In fixed income, value is added through controlled anticipation of market trends. Risk control is of major importance, with modest changes in areas of significant risk and aggressive changes in low-risk areas.

The mix of tax-exempt assets as of Jan. 1 was 70% stocks and 30% bonds.

Seventy percent of research is generated internally, with 200 stocks followed closely and 500, generally.

N.M. Rothschild International Asset Management is owned 80% by N.M. Rothschild and Sons Ltd., and 20% by Rothschild Inc. The total under management by the parent and all subsidiaries is $10 billion, of which $7 billion is tax-exempt.

Clients include GM, PacTel, American Airlines and Delaware.

Chief investment officer and client contact is James Heyworth-Dunne.

Rothschild Securities Corp.

33 W. Monroe, Chicago, Ill. 60603; (312) 781-8950

Total assets managed	$105,000,000
Tax-exempt assets managed	$65,000,000
401(k) and 457 assets managed	$7,000,000
Minimum separate account	$250,000
Tax-exempt clients	61

MOST MASTER TRUST TEAMS ARE CONNECTED BY TELEPHONE. NOT OURS.

It's pretty obvious that a Master Trust team can only run at peak efficiency when everyone on the team knows what everyone else is doing.

However, of all major money center banks, only The Bank of New York seems to have figured out that the way to achieve this is not via telephone tag.

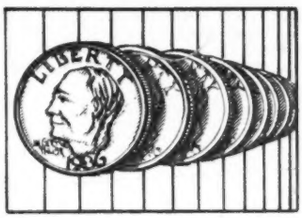
It's by having each Master Trust team work together–not just figuratively, but literally. Desk to desk. Terminal to terminal.

So your administrative officer can literally turn to your investment specialist or your accountant to get your questions answered and your requests acted upon immediately. For that matter, you can call any one of them directly.

What's just as important, The Bank of New York has committed its resources to supporting the teams with one of the most extensive and highly sophisticated "back office" complexes anywhere, featuring timely, accurate, audited reports, cash management services, advanced on-line technology and performance measurement.

To learn more about our team approach to Master Trust, call Robert S. Darbee, Vice President, at (212) 530-1351. Or write him at The Bank of New York, 19 Rector Street, New York, NY 10015.

THE BANK OF NEW YORK
MASTER TRUST



Types of accounts managed C
No. of portfolio managers 4

Rothschild Securities Corp. is an equity and balanced manager.

For equity, the firm identifies growth companies with special attributes that may not be fully discounted in the marketplace.

In fixed income, it structures short- and intermediate-term laddered-maturity portfolios comprising investment grade companies. The firm diversifies by industry, company, sector and special features.

The tax-exempt asset mix Jan. 1 was 43% stocks, 49% bonds and 8% cash.

Chief investment officer and client contact is Richard F. Karger, president.

Roulston & Co. Inc.

4000 Chester Ave., Cleveland, Ohio 44103; (216) 431-3000

Total assets managed	$500,000,000
Tax-exempt assets managed	$300,000,000
International assets managed	$3,000,000
401(k) and 457 assets managed	$50,000,000
Minimum separate account	$100,000
Tax-exempt clients	236
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	35

Roulston & Co. Inc. is an equity, fixed-income and balanced manager with international capabilities.

Its equity approach relies on Graham & Dodd.

In addition to basing its fixed-income approach on the economic and interest rate outlook, the firm gives weight to interest coverage, refunding protection, coupon, maturity and marketability as related to current yield and yield to maturity.

The mix of tax-exempt assets Jan. 1 was 80% stocks, 18% bonds and 2% cash.

Ninety percent of research is generated internally, with 310 stocks followed closely and 750, generally.

Chief investment officer and client contact is Thomas H. Roulston, president.

RPI Institutional Services

521 Fifth Ave. New York, N.Y. 10175; (212) 986-7510

Total assets managed	$10,000,000
Tax-exempt assets managed	$10,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	4

RPI Institutional Services Inc. is an oil and gas manager.

As of Jan. 1, all tax-exempt assets were in oil and gas.

Its client is Owens-Illinois.

Chief investment officer and client contact is Robert C. Metzger.

The RREEF Funds

650 California St., Suite 1800, San Francisco, Calif. 94108; (415) 781-3300

Total assets managed	$2,800,000,000
Tax-exempt assets managed	$2,800,000,000
Real estate assets managed	$2,265,000,000
Tax-exempt clients	80
Types of accounts managed	CEFGJ

The RREEF Funds is a real estate manager that purchases only high-quality shopping centers, office and industrial buildings. All decisions relating to acquisitions are made by a team of real estate principals.

As of Jan. 1., all tax-exempt assets were in equity real estate.

Clients include AT&T, IBM, Connecticut, Minnesota State Board.

Client contact is Paul Sack, principal.

Frank Russell Trust Co.

P.O. Box 1454, First Interstate Plaza, Tacoma, Wash. 98401; (206) 572-2282

Total assets managed	$2,166,000,000
Tax-exempt assets managed:	
Total	$2,166,000,000
Commingled accounts	$2,166,000,000
Real estate assets managed	$124,000,000
International assets managed	$137,000,000
401(k) and 457 assets managed	$210,000,000
Tax-exempt clients	133
Types of accounts managed	CGJ

Frank Russell Trust Co. is an equity, fixed-income, balanced, real estate and international manager.

In equities, it uses a multistyle, multimanager approach offering an array of commingled investment vehicles stressing diversification.

The fixed-income objectives are low volatility, diversification against equity investments and liquidity.

In real estate, managers use six different investment styles in open-end funds to capture various niches of the market.

The Jan. 1 tax-exempt asset mix was 60% stocks, 21% bonds, 7% cash, 6% equity real estate and 6% international equities.

Clients include Minneapolis Employees, PACCAR, Chesebrough Pond's and Timber Operators Council.

It is a wholly owned subsidiary of The Frank Russell Co.

David A. Anderson, senior vice president, is chief investment officer. Paul R. Kaltinick, president and chief executive officer, is client contact.

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

S

Sabl Associates

2444 Wilshire Blvd., No. 500, Santa Monica, Calif. 90403; (213) 828-4240

Total assets managed	$38,000,000
Tax-exempt assets managed	$14,000,000
International assets managed	$500,000
Minimum separate account	$100,000
Tax-exempt clients	15
Types of accounts managed	CF
No. of portfolio managers	2

Sabl Associates is an equity manager. Its equity philosophy is Graham & Dodd, but it will use growth stocks as a backup.

The mix of tax-exempt assets Jan. 1 was 90% stocks, 4% bonds and 6% cash.

One client was added in 1985.

Forty percent of research is generated internally, with 50 stocks followed closely and 150, generally.

Chief investment officer is Frederick M. Sabl, president. Client contact is Ralph E. Weil, vice president.

Ronald Sadoff Associates

6971 N. Beech Tree Road, Milwaukee, Wis. 53209; (414) 352-8460

Total assets managed	$40,000,000
Tax-exempt assets managed	$35,000,000
Minimum separate account	$100,000
Tax-exempt clients	65
No. of portfolio managers	1

Equity manager Ronald Sadoff Associates uses a low-risk, high-potential, top-down approach focusing upon leading industries and companies emerging from long-term down-trends.

It takes a top-down fixed-income approach combining interest rate anticipation and credit analysis, with close attention to the policy actions of the Federal Reserve.

The firm follows 150 stocks closely and generates all research internally.

Ronald B. Sadoff, is chief investment officer and client contact.

SAFECO Asset Management

SAFECO Plaza, T-14, Seattle, Wash. 98185; (206) 545-5727

Total assets managed	$432,000,000
Tax-exempt assets managed	$425,000,000
Types of accounts managed	CFJ
No. of portfolio managers	5
Size of research staff	7

SAFECO Asset Management Co. offers equity, fixed-income and balanced capabilities.

In equities, the approach uses low p/e and Graham & Dodd analysis.

In fixed income, interest rate anticipation is used.

The asset mix Jan. 1 was 45% stocks, 37% bonds and 18% cash.

The firm is affiliated with SAFECO Corp.

Eugene D. Holen, vice president, is chief investment officer and client contact.

Safian Investment Research

545 Fifth Ave., New York, N.Y. 10017; (212) 867-0100

Total assets managed	$20,000,000
Tax-exempt assets managed	$10,000,000
Minimum separate account	$500,000
Tax-exempt clients	6
Types of accounts managed	CJ
No. of portfolio managers	2
Size of research staff	6

Safian Investment Research Inc. is a balanced manager.

Its equity approach emphasizes sectoral analysis of the economy and seeks confirming signals from industry and stock market groups.

Its fixed-income approach uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 65% stocks, 20% bonds and 15% cash.

Kenneth Safian, president, is chief investment officer. John E. Schmidt Jr., vice president, is client contact.

Santaularia & Associates

647 Massachusetts, Suite 400, Lawrence, Kan. 66044; (913) 841-0150

Total assets managed	$8,000,000
Tax-exempt assets managed	$7,000,000
Minimum separate account	$50,000
Tax-exempt clients	12
Types of accounts managed	CJ
No. of portfolio managers	1

Santaularia & Associates Ltd. is an equity manager with a market timing approach, basing it on a technical trading system that follows equity-oriented and individual mutual funds. Options are used.

Its fixed-income approach also uses a technical trading system based on market indexes and interest rates.

The Jan. 1 tax-exempt asset mix was 93% stocks, 5% bonds and 2% cash.

Ninety percent of research is generated internally, with 200 stocks followed closely and 800, generally.

Jes Santaularia, president, is chief investment officer and client contact.

Fayez Sarofim & Co.

2 Houston Center, No. 2907, Houston, Texas 77010; (713) 654-4484

Total assets managed	$9,061,000,000
Tax-exempt assets managed	$8,275,000,000
Real estate assets managed	$47,000,000
Tax-exempt clients	184
Types of accounts managed	CEFGJ
No. of portfolio managers	11

Fayez Sarofim & Co. is an equity, balanced and real estate manager.

The equity focus is on both value and growth to produce return from appreciation and income. Fundamental economic and company analysis are the foundation of a top-down, flexible process with current emphasis on large-cap companies with highly predictable earnings growth and market multiple.

The firm's fixed-income approach is keyed to timely shifts in portfolio maturity as dictated by the interest rate outlook.

The real estate approach provides a balance between preservation of capital and real rate of return generated from a combination of appreciation and growing income stream in quality real estate using a participating mortgage structure.

The asset mix Jan. 1 was 79.6% stocks, 19% bonds, 1.4% cash.

The firm follows 60 to 70 stocks closely and 300, generally; 80% of research is generated internally.

The chief investment officer is Fayez Sarofim, chairman of the board and president; client contact is William K. McGee Jr., senior vice president.

Sasco Capital Inc.

10 Sasco Hill Road, Fairfield, Conn. 06430; (203) 254-6800

Total assets managed	$300,000,000
Tax-exempt assets managed	$300,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	4
Size of research staff	1

Sasco Capital Inc. is an equity manager emphasizing dynamic value.

Managers seek financial underachievers where they anticipate significant corporate decisions that will enhance shareholder values. Options are used.

The Jan. 1 tax-exempt asset mix was 98% stocks and 2% cash.

Managers follow 50 to 100 stocks closely and 400, generally. All research is generated internally.

IBM is a client.

Lee C. Garcia, managing director, is chief investment officer. Daniel F. Sullivan, managing director, is client contact.

M.D. Sass Investors Services

475 Park Ave. S., New York, N.Y. 10016; (212) 532-6010

Total assets managed	$2,293,000,000
Tax-exempt assets managed	$1,949,000,000
Real estate assets managed	$200,000,000
International assets managed	$26,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	90
Types of accounts managed	CEFGJ
No. of portfolio managers	10

M.D. Sass Investors Services Inc. is an equity, fixed-income and balanced manager.

The equity approach seeks securities with positive, tangible factors unrecognized or misperceived by the investment community. The firm concentrates the portfolio in market sectors that will respond favorably to unanticipated, emerging investment themes. Options are used.

In fixed income, it combines inefficiently priced and derivative securities into the portfolio with the desired interest rate sensitivity.

The Jan. 1 tax-exempt mix was 43% stocks, 38% bonds, 9% cash and 10% mortgage-backed securities.

Managers follow 120 stocks closely and 850, generally; 60% of research is generated internally.

Clients include Coca-Cola Bottling, Los Angeles City Employees, Rochester Carpenters and Del Webb Foundation.

Martin D. Sass, president, is chief investment officer. Thomas J. Mackell Jr., senior vice president, is client contact.

Saybrook Capital

610 Fifth Ave., New York, N.Y. 10020; (212) 307-5503

Total assets managed	$125,000,000
Tax-exempt assets managed	$80,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	10
Types of accounts managed	CEF
No. of portfolio managers	2

Saybrook Capital is an equity and balanced manager.

In equities, the firm emphasizes undervalued growth, focusing on out-of-favor growth companies. The fixed-income approach uses interest rate anticipation. Options are used.

The Jan. 1 tax-exempt asset mix was 80% stocks, 15% bonds and 5% cash.

Clients include Wake Forest University and University of South Carolina.

One-half of the research is generated internally, with 75 stocks followed closely and 125, generally.

Bruce M. Babcock and Ravenel B. Curry III are chief investment officers. Mr. Curry is client contact.

SBC Portfolio Management International Inc.

1 World Trade Center, Suite 9051, New York, N.Y. 10048; (212) 938-7465

Total assets managed	$120,000,000
Tax-exempt assets managed	$41,000,000
International assets managed	$41,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	6
Types of accounts managed	C
No. of portfolio managers	3

SBC Portfolio Management International Inc. is an international manager, taking a global top-down approach to equities with country and currency selection treated as separate decisions. Options are used. In fixed income, it uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 91% stocks and 9% cash.

Discount Corporation of New York Advisers

Institutional Fixed Income
Asset Management

A Wholly Owned
Subsidiary of
Discount Corporation
of New York

58 Pine Street
New York, N.Y. 10005
212-248-8989
WU 125675

The firm is a wholly owned affiliate of the Swiss Bank Corp.

Peter J. Morant, managing director, is chief investment officer. John W. Conlin, marketing director, and Rita J. Kleinman, marketing associate, are client contacts.

Sceptre Investment Counsel

40 University Ave., Suite 802, Toronto, Ontario M5J 2G1; (416) 977-6111

Total assets managed	$1,661,000,000(U.S.)
Tax-exempt assets managed:	
Total	$1,531,000,000
For subsidiaries of U.S. firms	$613,000,000
Real estate assets managed	$32,000,000
Minimum separate account	$18,000,000
Tax-exempt clients:	
Total	59
U.S. subsidiaries	23
Types of accounts managed	CEFU
No. of portfolio managers	9
Size of research staff	4

Sceptre Investment Counsel Ltd., a Canadian firm, is an equity and balanced manager.

The firm emphasizes sector rotation and Graham & Dodd principles in its equity approach.

In fixed income, the objective is to maintain a high and stable income stream over time while seeking to reduce the volatility of the portfolio. Interest rate anticipation and sector analysis are used.

The asset mix Jan. 1 was 35% Canadian stocks, 46% bonds, 7% cash, 2% mortgages and 10% U.S. stocks.

J. Douglas Grant, president, is chief investment officer. George B. Turnbull, vice president, is client contact.

Schafer Capital Management

645 Fifth Ave., New York, N.Y. 10022; (212) 644-1800

Total assets managed	$925,000,000
Tax-exempt assets managed	$925,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	9
Types of accounts managed	CG
No. of portfolio managers	2

Schafer Capital Management is an equity manager emphasizing low p/e.

The Jan. 1 tax-exempt asset mix was 99% stocks and 1% cash.

Managers follow 50 stocks closely.

Clients include INCO, GTE, Xerox and Washington state.

David Schafer is chief investment officer and client contact.

A.R. Schmeidler & Co.

555 Fifth Ave., New York, N.Y. 10017 (212) 687-9800

Total assets managed	$220,000,000
Tax-exempt assets managed	$70,000,000
International assets managed	$5,000,000
401(k) and 457 assets managed	$3,000,000
Minimum separate account	$300,000
Tax-exempt clients	25
Types of accounts managed	CEFJ
No. of portfolio managers	5
Size of research staff	3

A.R. Schmeidler & Co. is a balanced manager.

In equities, it focuses on positive macroeconomic trends, selecting those beneficiaries that sell for the lowest values relative to cash flow per share, real asset value and highest relative earnings streams per share.

In fixed income, the firm extends maturities when real interest rates are high and inflation is stable or declining.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

Arnold Schmeidler, president, is chief investment officer. Thomas T. Daniels, senior vice president, is client contact.

Schroder Capital Management International

1 State St., New York, N.Y. 10004; (212) 269-6500

Total assets managed	$958,000,000
Tax-exempt assets managed	$719,000,000
International assets managed	$557,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	15
Types of accounts managed	CEG
No. of portfolio managers	4
Size of research staff	40

Schroder Capital Management International Inc. is an international equity manager.

Its equity approach emphasizes stock selection in countries with the best economic prospects. Guidelines for country investment are based on two-year economic projections. Emerging growth securities make up the core of the portfolios. Fixed income is used as a limited tactical alternative.

The Jan. 1 tax-exempt asset mix was 90% stocks, 9% bonds and 1% cash.

Clients include GM, 3M, Dow and Cornell University.

The firm is wholly owned by Schroders Inc.

Peter Sedgwick, chief executive, is chief investment officer. Sharon L. Haugh, first vice president-director of international marketing, is client contact.

Schroder Real Estate Associates

437 Madison Ave., New York, N.Y. 10022; (212) 486-9800

Total assets managed	$980,000,000
Tax-exempt assets managed	$932,000,000
Real estate assets managed	$932,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	103
Types of accounts managed	CGJ
No. of portfolio managers	2

Schroder Real Estate Associates takes an approach that is biased toward creation of value and sell opportunities where underperforming properties are acquired and subjected to intensive, direct property and construction management schemes.

The Jan. 1 tax-exempt asset mix was 86% equity real estate and 14% mortgages.

Clients include IBM (U.K.), British Airways, British Shell and British Post Office and Telecommunication Workers.

Charles Grossman, managing partner, is chief investment officer. John E. Emmanuel, senior vice president, and Linda F. Wooldridge, vice president, are client contacts.

Schupf, Woltman & Co. Inc.

P.O. Box 179, Hamilton, N.Y. 13346; (315) 824-1333

Total assets managed	$180,000,000
Tax-exempt assets managed	$150,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	10
Types of accounts managed	CFJ
No. of portfolio managers	1
Size of research staff	2

Schupf, Woltman & Co. Inc., an equity manager emphasizing growth stock, manages portfolios with emphasis on disciplined research and fundamental analysis. Its fixed-income approach is passive.

The mix of tax-exempt assets Jan. 1 was 60% stocks, 35% bonds and 5% cash.

Clients include Agway, Warnaco and Niagara Mohawk.

The firm follows 300 stocks closely and 1,000, generally; 50% of research is generated in-house.

Paul J. Schupf is chief investment officer and president. Client contact is Lee Woltman, vice president.

SCNC Advisory Corp.

101 Greystone Blvd., Columbia, S.C. 29226; (803) 765-3727

Total assets managed	$1,701,000,000
Tax-exempt assets managed:	
Total	$563,000,000
Commingled accounts	$69,000,000
Separate accounts	$494,000,000
Real estate assets managed	$1,000,000
401(k) and 457 assets managed	$9,000,000
Types of accounts managed	CEFG
No. of portfolio managers	4

SCNC Advisory Corp. is an equity and fixed-income manager.

The equity approach uses a quantitative approach to determine financially strong companies that provide the greatest growth prospects at the most reasonable earnings multiples.

In fixed-income, the bank uses well-laddered portfolios centering around the point of the yield curve that provides the greatest return relative to risk.

The Jan. 1 tax-exempt asset mix was 69% stocks, 20% bonds, 10% cash and 1% mortgages.

Managers follow 150 stocks closely and 2,000, generally. All research is generated internally.

Clients include BellSouth, Carolina Power & Light and Duke Power.

Robert R. Beaudette, president, is chief investment officer. Lynn M. Gantt, senior vice president and trust officer, is client contact.

$63,000,000

Property Capital Trust
and
Property Capital Associates

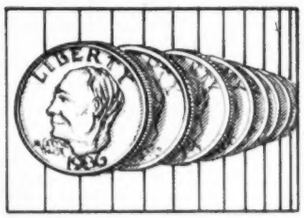
announce the formation of a real estate investment partnership with major institutional investors to provide equity financing for Canyon View Apartments.

Located in a rapidly growing suburb of San Francisco, Canyon View is an 844-unit apartment project in a master-planned residential development.

Property Capital Trust is a major investor in the partnership and serves as General Partner. Property Capital Associates through affiliates initiated the transaction and serves as Advisor to the partnership.

Property Capital Trust/Property Capital Associates
200 Clarendon Street, Boston, Massachusetts 02116
617/536-8600

This announcement appears as a matter of record only.



Walter Scott International

9 Great Stuart St., Edinburgh, Scotland EH3 7TP; (031) 225-9211

Total assets managed	$50,000,000
Tax-exempt assets managed	$50,000,000
International assets managed	$45,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	4
Types of accounts managed	C
No. of portfolio managers	4
Size of research staff	2

Walter Scott International Ltd. is an international manager with an equity approach based on growth stock. Portfolios are structured representing the top 25% of future world stock indexes. It identifies the fastest growing sectors, followed by identifying stocks with the highest internal growth rates.

As of Jan. 1, all tax-exempt assets were in international equity.

Walter Scott International is jointly owned by Walter Scott & Partners and First Interstate Investment Services.

Chief investment officer is Walter Grant Scott, director. Client contact is Richard A. Miller, director.

Scudder, Stevens & Clark

345 Park Ave., New York, N.Y. 10154; (212) 350-8200

Total assets managed	$28,530,000,000
Tax-exempt assets managed	$10,677,000,000
Real estate assets managed	$2,939,000,000
International assets managed	$110,000,000
401(k) and 457 assets managed	$150,000,000
Passive assets managed	$700,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	112
Size of research staff	43

Scudder, Stevens & Clark and its subsidiary, Scudder, Stevens & Clark of Canada, Toronto, are equity, fixed-income, balanced and international managers.

In equities, the firm is committed to thorough, independent research to identify companies experiencing growth in earnings, dividends and assets on a continuing basis. Managers emphasize stock price to value.

In fixed income, the bond investment process relies on original and close interaction between managers and the market. Interest rate projections and the opportunity/risk in market sectors and issues are critical. Options and fixed-income futures are used.

Managers arrange direct real estate equity commitments for clients, both individually and in partnerships. No pooled vehicles are offered.

The asset mix Jan. 1 was 22.1% stocks, 39.1% bonds, 11.3% cash, 1.3% equity real estate and mortgages and 26.2% mortgage-backed securities.

George S. Johnston, managing director and president, is chief investment officer. Client contact is Victoria J. Herget, principal.

Seafirst Bank

P.O. Box 3586, Seattle, Wash. 98124; (206) 442-3296

Total assets managed	$2,459,000,000
Tax-exempt assets managed:	
Total	$618,000,000
Commingled accounts	$230,000,000
Separate accounts	$388,000,000
Real estate assets managed	$121,000,000
Passive assets managed	$85,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	260
Separate	40
Types of accounts managed	CEF
No. of portfolio managers	12
Size of research staff	8

Seafirst Bank is an equity, fixed-income, balanced and real estate manager.

Its primary equity approach is value with cash decisions and emphasis on stock groupings.

In fixed income, managers make moderate changes in the duration of the portfolio. Mortgage-backed securities are emphasized.

In real estate, properties with good current return and prospects of capital appreciation are sought.

The Jan. 1 tax-exempt asset mix was 15% stocks, 44% bonds, 22% cash, 2% equity real estate, 1% mortgages and 16% mortgage-backed securities.

Clients include Boeing, Rockwell Hanford, Northwest Sheet Metal and University of Washington.

John Privat, vice president and manager, is chief investment officer. Barbara Glenn, assistant vice president, is client contact.

Seagate Capital Management

245 Summit St., Suite 1000, Toledo, Ohio 43604; (419) 259-8169

Total assets managed	$107,000,000
Tax-exempt assets managed	$90,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	9
Types of accounts managed	CEFGJ
No. of portfolio managers	2
Size of research staff	1

Seagate Capital Management is an equity and balanced manager.

In equities, the firm constructs portfolios of companies with higher rates of profitability, earnings growth and stability, selling at reasonable value as determined by discounted cash flow and relative multiple measures. Its fixed-income approach relies on interest rate anticipation.

The mix of tax-exempt assets as of Jan. 1 was 55% stocks, 19% bonds and 26% cash.

Seagate Capital Management is a subsidiary of Toledo Trustcorp Inc.

Chief investment officer and client contact is Jeffrey A. Slade, president.

Seattle Trust

P.O. Box 12907, Seattle, Wash. 98111; (206) 223-2141

Total assets managed	$227,000,000
Tax-exempt assets managed:	
Total	$108,000,000
Commingled accounts	$36,000,000
Separate accounts	$72,000,000
401(k) and 457 assets managed	$4,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	183
Separate	34
Types of accounts managed	CEFJ
No. of portfolio managers	3

Seattle Trust offers equity, fixed-income and balanced accounts.

Equity funds have lower-than-stock market risk, emphasizing common stocks and money market instruments. Stock selection is based on historical p/e multiples and earnings outlook.

In fixed-income, laddered maturities are employed, using interest rate forecasting to lengthen or shorten average portfolio maturity based on business cycle outlook. Maximum average maturity is 10 years.

The Jan. 1 tax-exempt asset mix was 45% stocks, 30% bonds and 25% cash.

Richard A. Klauber, vice president, is chief investment officer. Client contact is Steve Koenig.

Securities Counselors of Iowa Inc.

200 Second Ave. S.E., Cedar Rapids, Iowa 52406; (319) 366-7801

Total assets managed	$250,000,000
Tax-exempt assets managed	$120,000,000
401(k) and 457 assets managed	$3,000,000
Minimum separate account	$500,000
Tax-exempt clients	160
Types of accounts managed	CEF
No. of portfolio managers	10
Size of research staff	7

Securities Counselors of Iowa Inc. is an equity manager.

It takes a disciplined value-oriented approach, investing in companies with strong balance sheets whose stocks are undervalued.

Bonds are used primarily when interest rate trends provide a total return greater than stocks and to minimize volatility.

Securities Counselors of Iowa Inc. is a subsidiary of SCI Financial Group.

Chief investment officer is John N. Knapp, chairman. Client contact is Myron R. Holman, managing director, 307 N. Michigan Ave., Chicago, Ill. 60601; (312) 332-2135.

Security Capital Real Estate

1290 Avenue of Americas, New York, N.Y. 10104; (212) 408-2911

Total assets managed	$1,000,000,000
Tax-exempt assets managed	$745,000,000
Real estate assets managed	$745,000,000
Tax-exempt clients	153
Types of accounts managed	CGJ
No. of portfolio managers	8

Security Capital Real Estate Corp., a real estate manager, is a contrarian, value-oriented real estate manager, buying proven, cash-yielding office, retail properties and apartments. It seeks value enhancement through internal property management and applies a three- to five-year sell discipline.

All of the firm's tax-exempt assets were in equity real estate Jan. 1.

Clients include U S WEST, K mart, LTV and Ohio.

Security Capital Real Estate Corp. is a wholly owned subsidiary of Security Capital Corp.

Chief investment officer is John H. Streicker, president. Client contact is Lewis W. Kresch, first vice president.

Security Funding Corp.

P.O. Box 17583, Salt Lake City, Utah 84117; (801) 272-9261

Total assets managed	$21,000,000
Tax-exempt assets managed	$15,000,000
Minimum separate account	$20,000
Tax-exempt clients	110
Types of accounts managed	CJ
No. of portfolio managers	3

Security Funding Corp. is an equity manager.

Managers use a market timing model to switch between equity-type mutual funds and money market funds.

The Jan 1. tax-exempt asset mix was 85% stocks and 15% cash.

Ninety percent of research is generated internally.

Neil P. Christenson, president, is chief investment officer. Robert P. Christenson, vice president, is client contact.

The Security National Bank of Sioux City

Sixth and Pierce, Sioux City, Iowa 51101; (712) 277-6692

Total assets managed	$267,000,000
Tax-exempt assets managed:	
Total	$60,000,000
Commingled accounts	$59,000,000
Separate accounts	$1,000,000
Real estate assets managed	$300,000
Minimum separate account	$30,000
Tax-exempt clients:	
Commingled	109
Separate	4
Types of accounts managed	CEJ
No. of portfolio managers	4
Size of research staff	1

The Security National Bank of Sioux City is an equity and fixed-income manager.

The equity approach is analytical and centers on balance sheet strength and historic earnings progress in relation to a stock's price.

In fixed income, it invests in high-quality securities, taking into account relative yield spreads and interest rate outlooks.

The Jan. 1 tax-exempt asset mix was 35% stocks, 50% bonds (including a small amount in mortgages), 13% cash and 2% GICs.

Michael D. Moreland, vice president-investments, is chief investment officer. Michael W. Shade, employee benefits division manager, is client contact.

Security Pacific Investment Managers Inc.

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1300

Total assets managed	$4,592,000,000
Tax-exempt assets managed	$4,345,000,000
Real estate assets managed	$122,000,000
International assets managed	$12,000,000
401(k) and 457 assets managed	$117,000,000
Passive assets managed	$314,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	40
Types of accounts managed	CEFGJ
No. of portfolio managers	10
Size of research staff	4

Security Pacific Investment Managers Inc. has equity, fixed-income, balanced, real estate and options capabilities.

In equities, managers select sector and stock qualities through identification of the business cycle phase.

Its fixed-income approach uses interest rate forecasts to identify the liquefication and deliquefication phases of the credit cycle. Target durations, maturity quality and sector guidelines are then developed.

Options, stock index futures and fixed-income futures are used.

In real estate, the firm actively manages an open-end commingled fund using high-quality real estate debt-related instruments.

The Jan. 1 tax-exempt asset mix was 34.3% stocks, 49.7% bonds, 11.5% cash, 1.5% mortgages, 1.2% mortgage-backed securities and 1.8% real estate debt fund.

The firm is a wholly owned subsidiary of Security Pacific Corp.

Lloyd McAdams, president and chief executive officer, is chief investment officer. Heather U. Baines, senior vice president-director of marketing and client services, is client contact.

Alan G. Seidner Co.

P.O. Box 60510, Pasadena, Calif. 91106; (818) 795-2251

Total assets managed	$542,000,000
Tax-exempt assets managed	$64,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	5
Types of accounts managed	CEFG
No. of portfolio managers	3
Size of research staff	2

The Alan G. Seidner Co. is a fixed-income manager.

The firm uses sector analysis. To select investment candidates, the relative value of instruments, obtained through yield spread analysis, and maturities, determined through yield curve analysis, are used.

The asset mix Jan. 1 was 80% bonds and 20% cash.

Clients include Bixby Ranch Co., Presbyterian Intercommunity Hospital and R&B Enterprises.

Alan G. Seidner, president, is chief investment officer. Sandee Sheek and Carol Burr, investment analysts, are client contacts.

J&W Seligman & Co. Inc.

1 Bankers Trust Plaza, New York, N.Y. 10006; (212) 488-0212

Total assets managed	$5,400,000,000
Tax-exempt assets managed	$1,300,000,000
401(k) and 457 assets managed	$14,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	67
Types of accounts managed	CEFGJ
No. of portfolio managers	9
Size of research staff	12

J&W Seligman & Co. Inc. is an equity, fixed-income, balanced and high yield manager.

In equities, managers invest in medium-size companies for capital appreciation. Companies must have a strong balance sheet and fundamentals, including sales, cash flow and earnings growth. Options are used.

Fixed-income investments are managed conservatively with emphasis on consistently positive rates of return. Virtually no credit risk is taken.

The Jan. 1 tax-exempt asset mix was 75% stocks, 19% bonds and 6% cash.

Managers follow 70 stocks closely and 150, generally; 70% of research is generated internally.

Clients include New York State Common Retirement Fund, Control Data, Robertshaw Controls and University of Oklahoma Foundation.

J&W Seligman Trust Co. is a wholly owned subsidiary of the firm.

John D. Lynch is chief investment officer. Ernest A. Remig, senior vice president, is client contact.

Shaw Management Co.

851 S.W. Sixth Ave., Suite 800, Portland, Ore. 97204; (503) 228-4884

Total assets managed	$60,000,000
Tax-exempt assets managed	$40,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts managed	CEJ
No. of portfolio managers	3
Size of research staff	2

Shaw Management Co. is a balanced manager.

In equities, managers invest in anticipation of changes in economic, industrial and financial trends. It stresses Graham & Dodd and low p/e.

In fixed income, world economic data and commodity trends are scrutinized to find correlations that anticipate domestic interest rate shifts.

The Jan. 1 tax-exempt asset mix was 70% stocks, 15% bonds and 15% cash.

Ralph R. Shaw, president, is chief investment officer. John Chamberlain, partner, is client contact.

Shawmut Banks

1 Federal St., Boston, Mass. 02211; (617) 292-3885

Total assets managed	$2,950,000,000*
Tax-exempt assets managed:	
Total	$1,325,000,000
Commingled accounts	$211,000,000
Separate accounts	$1,114,000,000
Minimum separate account	$800,000
Types of accounts managed	CEFGJ

*1984 data

Shawmut Banks offers equity, fixed-income and balanced capabilities.

For equities, it takes a value-oriented approach; for fixed income, interest rate anticipation is used.

The asset mix was 40% stocks, 43% bonds and 17% cash.

The bank follows 100 stocks closely.

One Federal Asset Management Inc. is a subsidiary.

Thomas B. Brown, senior vice president, is the chief investment officer. Peter A. Wilson, vice president, is the client contact.

Shearson Asset Management Inc.

2 World Trade Center, New York, N.Y. 10048; (212) 321-5313

Total assets managed	$4,656,000,000
Tax-exempt assets managed	$1,354,000,000
Minimum separate account	$200,000
Tax-exempt clients	495
Types of accounts managed	CFJ
No. of portfolio managers	15

Shearson Asset Management Inc. is an equity and balanced manager.

In equities, managers use a valued approach, seeking stocks with low p/e, high book value per share and high dividend.

The fixed-income approach is designed to mitigate risk and create smooth performance. Managers purchase government securities and top-grade corporates with maturities ranging from two to 10 years.

The Jan. 1 tax-exempt asset mix was 45% stocks, 50% bonds and 5% cash.

Managers follow 50 stocks closely and 150, generally.

Clients include New York State Common Retirement Fund, United Merchants & Manufacturers, Sundstrand and Jersey City (N.J.) Employees.

The firm is a wholly owned subsidiary of Shearson Lehman Brothers Inc.

Thomas L. Pulling, chairman and chief executive officer, is chief investment officer. Warren Bender, senior vice president, is client contact.

Sheffield & Co. Inc.

900 Circle 75 Parkway, Suite 750, Atlanta, Ga. 30339; (404) 953-1597

Total assets managed	$12,000,000
Tax-exempt assets managed	$9,000,000
Real estate assets managed	$500,000
Minimum separate account	$150,000
Tax-exempt clients	45
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Sheffield & Co. Inc. is a balanced manager.

In equities, managers use a value-oriented approach seeking stocks selling at or below a calculated purchase price based upon book value as adjusted for earnings growth rates. The fixed-income approach uses interest rate anticipation. Options are used.

The Jan. 1 tax-exempt asset mix was 45% stocks, 44% bonds, 10% cash and 1% mortgage-backed securities.

Roger Sheffield is chief investment officer and client contact.

Shields Asset Management

701 Westchester Ave., White Plains, N.Y. 10604; (914) 684-6900

Total assets managed	$2,300,000,000
Tax-exempt assets managed	$2,300,000,000
Passive assets managed	$150,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	75
Types of accounts managed	CEGJ
No. of portfolio managers	7
Size of research staff	4

Shields Asset Management is a balanced manager.

Its equity approach is based on the identification of especially attractive and unattractive sectors of the stock market.

In fixed income, managers use most likely, pessimistic and optimistic yield projections to construct portfolios.

The Jan. 1 tax-exempt asset mix was 32% stocks, 48% bonds and 20% cash.

Managers follow 100 stocks closely and 1,000, generally; 75% of research is generated internally.

Clients include Washington Metro, American Federation of Musicians, Philadelphia Teamsters and Service Employees International.

Kenneth Safian, director of investment strategy, is chief investment officer. Richard H. Nolan Jr., executive vice president, is client contact.

Siebel Capital Management

80 E. Sir Francis Drake Blvd., Larkspur, Calif. 94939; (415) 461-3850

Total assets managed	$1,296,000,000
Tax-exempt assets managed	$1,135,000,000
Minimum separate account	$4,000,000
Tax-exempt clients	74
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	2

Siebel Capital Management Inc. is an equity manager emphasizing a value-oriented approach to stock selection.

Its fixed-income approach uses interest rate anticipation to produce returns that exceed those for short-term instruments, maintain low exposure to risks and volatility and continuously preserve capital.

The Jan. 1 tax-exempt asset mix was 74% stocks, 11% bonds and 15% cash.

Managers follow about 75 stocks closely and 400, generally; 60% of research is generated internally.

Clients include Ohio State University, Xerox, Hospital Corp. of America and Honeywell.

The firm is a wholly owned subsidiary of Equitec Financial Group Inc.

Kenneth F. Siebel Jr., president, is chief investment officer. Lawrence A. Mitchell, executive vice president, is client contact.

Simmons Financial Management Inc.

2300 Mayfair Road, Suite 805, P.O. Box 13037, Milwaukee, Wis. 53213; (414) 476-4060

Total assets managed	$55,000,000
Tax-exempt assets managed	$10,000,000
Minimum separate account	$250,000
Tax-exempt clients	2
Types of accounts managed	CF
No. of portfolio managers	2

Simmons Financial Management Inc. is a balanced manager.

Its equity approach uses fundamental analysis to detect companies with quality earnings, dividend growth, solid financial conditions and quality management. Options are used. The fixed-income approach uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 50% stocks, 40% bonds and 10% cash.

Harold W. Simmons, president, is chief investment officer. James A. Karpowicz, vice president, is client contact.

Simms Capital Management

7 E. 76th St., New York, N.Y. 10021; (212) 861-2830

Total assets managed	$152,000,000
Tax-exempt assets managed	$34,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	5
Size of research staff	2

Simms Capital Management Ltd. is a global manager.

In equities, the firm emphasizes profit growth and value criteria to individual securities, within and across markets. Managers seek companies with sound management capabilities and significant growth potential.

In fixed income, it takes an active approach using the diversification benefits of the global markets to enhance returns and minimize volatility. Options and stock index futures are used.

The Jan. 1 tax-exempt asset mix was 99% stocks and 1% cash.

Calvin Puckett, chief executive officer, is chief investment officer. Robert A. Simms, chairman, is client contact.

Simpson Capital Management Co.

3108 PSFS Building, Philadelphia, Pa. 19107; (215) 629-0162

Total assets managed	$27,000,000
Tax-exempt assets managed	$7,000,000
Minimum separate account	$300,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	1

Simpson Capital Management Co. is an equity and fixed-income manager.

In equities, internal analysis generates an expected total return that is compared with market averages and bond yields. Derived valuation decisions apply to all stocks and market timing determines allocation decisions.

In fixed income, interest rate anticipation is used with Treasuries.

The Jan. 1 tax-exempt asset mix was 70% stocks and 30% bonds.

The firm follows 100 stocks closely and 200, generally; half the research is generated in-house.

Allen J. Simpson, president, is chief investment officer and client contact.

Siphron & Meyers

606 S. Olive St., Los Angeles, Calif. 90014; (213) 623-2659

Total assets managed	$125,000,000
Tax-exempt assets managed	$120,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	3
Types of accounts managed	CEGJ
No. of portfolio managers	2

Equity manager Siphron & Meyers uses active portfolio management with heavy economic sector weightings and stock selection. Fundamental securities analysis and an array of technical screens are used in its conservative, value orientation approach.

The Jan. 1 tax-exempt asset mix was 50% stocks and 50% cash.

Managers follow 80 stocks closely and 250, generally; half of the research is generated internally.

David C. Siphron and Robert L. Meyers are chief investment officers. Mr. Siphron is client contact.

Sirach/Flinn, Elvins Capital Management

3323 One Union Square, Seattle, Wash. 98101; (206) 624-3800

Total assets managed	$445,000,000
Tax-exempt assets managed	$414,000,000
401(k) and 457 assets managed	$5,000,000
Passive assets managed	$17,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	CEF
No. of portfolio managers	
Size of research staff	

Sirach/Flinn, Elvins Capital Management is a balanced, equity and fixed-income manager.

In equities, the firm buys successfu companies with increasing earnings a a price close to market p/e. Technica analysis is an overlay to fundamenta analysis.

The fixed-income approach uses interest rate anticipation, sector swapping and spread analysis.

The Jan. 1 tax-exempt asset mix was 55% stocks, 35% bonds and 10% cash.

Clients include Boeing, Seattle University, Western Washington Laborers and Alaska Bricklayers.

George Kauffman, principal, is chie investment officer. Ken Carlson, princi pal, is client contact.

Foundations spotlighted June 9.

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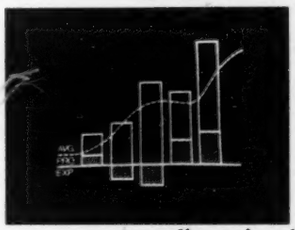

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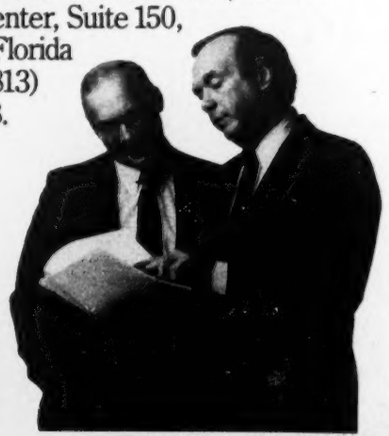

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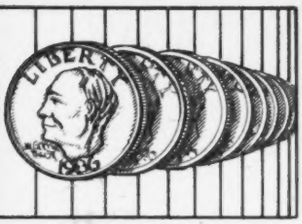

Sit Investment Associates

1714 First Bank Place West, Minneapolis, Minn. 55402; (612) 332-3223

Total assets managed	$1,488,000,000
Tax-exempt assets managed	$1,420,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	23
Types of accounts managed	CG
No. of portfolio managers	5
Size of research staff	3

Sit Investment Associates Inc. is an equity, fixed-income and balanced manager.

In equities, the firm uses a rotational style with a 10% to 15% position in smaller and emerging growth companies to maximize long-term opportunity.

The fixed-income approach uses an interest rate anticipation/rotational style and creates customized portfolio strategies. Fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 92.1% stocks, 0.4% bonds, 5% cash and 2.5% mortgage-backed securities.

Managers follow 200 stocks closely and 500, generally; 60% of research is generated internally.

Eugene C. Sit, president and chief executive officer, is chief investment officer. Peter L. Mitchelson, executive vice president, is client contact.

Skye Investment Advisors

20370 Town Center Lane, Suite 211, Cupertino, Calif. 95014; (408) 446-4471

Total assets managed	$377,000,000
Tax-exempt assets managed	$362,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	2

Skye Investment Advisors Inc. specializes in risk and hedging strategies.

The equity and fixed-income approaches use computerized hedging methods to protect portfolios against price declines. Option pricing, optimization theory and dynamic programming are used to achieve specified downside protection goals.

The Jan. 1 tax-exempt asset mix was 84% bonds and 16% mortgage-backed securities.

Clients include RepublicBank Dallas, Union Bank, Alta Mortgage and Zeta Mutual Trust.

Paul L. McEntire, president and chief executive officer, is chief investment officer. Manit Rye, senior vice president, and Pete Thomas are client contacts.

Gregory L. Smith & Sons Inc.

10890 Benson, Suite 140, Overland Park, Kan. 66210; (913) 451-1566

Total assets managed	$300,000,000
Tax-exempt assets managed	$300,000,000
Real estate assets managed	$15,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	2
Types of accounts managed	CG
No. of portfolio managers	1
Size of research staff	1

Gregory L. Smith & Sons Inc. is a fixed-income manager specializing in mortgage-backed securities.

The equity approach uses Graham & Dodd method.

The fixed-income approach is passive. Coupons and durations are managed but the securities are owned to payout. Options and fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 1% stocks, 75% bonds, 5% mortgage-backed securities and 19% cash.

Gregory L. Smith, president, is chief investment officer and client contact.

Smith Affiliated Capital Corp.

1221 Avenue of the Americas, Suite 1472, New York, N.Y. 10020; (212) 382-1680

Total assets managed	$215,000,000
Tax-exempt assets managed	$175,000,000
Passive assets managed	$11,000,000
Tax-exempt clients	33
Types of accounts managed	CEFGJ
No. of portfolio managers	3
Size of research staff	3

Smith Affiliated Capital Corp. is a fixed-income and balanced manager.

In equities, the firm seeks above-market returns using an opportunistic value approach with fundamental disciplines linked directly to capital market decisions.

In fixed income it is a duration manager, using interest rate anticipation and following economic trends.

The Jan. 1 tax-exempt asset mix was 30% stocks and 70% bonds.

Robert G. Smith, president, is chief investment officer. William Hay, executive vice president, is client contact.

Donald Smith & Co. Inc.

15 Essex Road, Paramus, N.J. 07652; (201) 368-9210

Total assets managed	$517,000,000
Tax-exempt assets managed	$517,000,000
401(k) and 457 assets managed	$14,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	12
Types of accounts managed	CEG
No. of portfolio managers	1
Size of research staff	3

Donald Smith & Co. Inc. is an equity manager that buys deeply undervalued securities based on long-term fundamental considerations.

The fixed-income approach uses interest rate anticipation and sector analysis.

The Jan. 1 tax-exempt asset mix was 59% stocks, 6% bonds and 35% cash.

Managers follow 200 stocks closely and 500, generally; 90% of research is generated internally.

Clients include Harvard University, Pillsbury and BATUS.

Donald G. Smith, president, is chief investment officer and client contact.

Smith Barney, Harris Upham & Co. Inc., Capital Management Division

1345 Avenue of the Americas, New York, N.Y. 10105; (212) 698-6227

Total assets managed	$1,166,000,000
Tax-exempt assets managed	$701,000,000
Real estate assets managed	$15,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	48
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	76

Smith Barney, Harris Upham & Co. Inc. is an equity and balanced manager.

In equities, the firm generally buys medium- to large-capitalization stocks. It analyzes relative dividend yields, relative price-to-book value ratios and relative price-earnings ratios.

In fixed income, the firm has a balanced maturity approach that emphasizes intermediate-term, high-quality issues. Interest rate anticipation and sector analysis are used.

The asset mix Jan. 1 was 45.9% stocks, 41.9% bonds, 6.3% cash, 2.1% mortgage-backed securities and 3.8% convertibles.

Sixty percent of the research is done in-house; 50 stocks are watched closely and 225, generally.

Clients include Lockheed and PPG.

Smith Barney Inc. is the parent.

Bruce D. Sargent, senior vice president, is chief investment officer. John J. Hock, vice president, is client contact.

Smith Breeden Associates

10890 Benson, Suite 140, Overland Park, Kan. 66210; (913) 451-1566

Total assets managed	$5,400,000,000
Tax-exempt assets managed	$0
Minimum separate account	$200,000,000
No. of portfolio managers	5
Size of research staff	3

Smith Breeden Associates specializes in mortgage-backed securities. It takes a passive approach, with coupons and durations managed but the securities owned to payout.

Options and fixed-income futures are used.

Douglas T. Breeden, chairman, is chief investment officer; Gregory L. Smith, president and chief executive officer, is client contact.

Smoot, Miller, Cheney & Co.

Crandall Building, Suite 312, Salt Lake City, Utah 84101; (803) 328-4835

Total assets managed	$1,192,000,000
Tax-exempt assets managed	$1,180,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	76
Types of accounts managed	CEFGJ
No. of portfolio managers	4
Size of research staff	2

Smoot, Miller, Cheney & Co. is an equity and balanced manager.

Its equity approach is based on Graham & Dodd and low p/e; its fixed-income approach uses interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 65.1% stocks, 23% bonds and 11.9% cash.

Managers follow 75 stocks closely and 150, generally; 60% of research is generated internally.

Clients include Utah, Arizona Pipe Trades, Montana Power and Fleming.

Robert Cheney, vice president, is chief investment officer. Lynn C. Miller, vice president, is client contact.

Society National Bank

800 Superior Ave., Cleveland, Ohio 44114; (216) 344-3000

Total assets managed	$2,822,000,000
Tax-exempt assets managed:	
Total	$1,450,000,000
Commingled accounts	$201,000,000
Separate accounts	$1,249,000,000
Real estate assets managed	$21,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	350
Separate	1,000
Types of accounts managed	CEFGJ
No. of portfolio managers	15
Size of research staff	3

Society National Bank is an equity, fixed-income and balanced manager, specializing in guaranteed investment contracts.

In equities, the bank uses a value-oriented quality approach stressing relative profitability, earnings momentum and price valuation.

Fixed income is managed to the specific risk and cash flow needs of each client with emphasis on rate outlook, spread analysis and computerized swap capabilities.

The Jan. 1 tax-exempt asset mix was 34% stocks, 47% bonds, 18% cash and 1% mortgages.

Clients include Ohio Carpenters, North American Philips, Parker Hannifin and Ohio Police and Firemen.

Donald Cruse Jr., senior vice president, is chief investment officer. James P. Foster, vice president, is client contact.

Solomon Asset Management

71 Broadway, New York, N.Y. 10006; (212) 509-8122

Total assets managed	$1,517,000,000
Tax-exempt assets managed	$1,237,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	17
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	2

Solomon Asset Management is a fixed-income manager that specializes in high yields.

Managers focus on lower-rated, high-yield and convertible bonds in their approach. The security mix depends on yield spreads, and the firm aggressively seeks high total returns. The strategy is to obtain the best risk/return investments, but no attempt is made to time interest rates.

The tax-exempt asset mix Jan. 1 was 98% bonds and 2% cash.

Eighty percent of research is generated internally. Clients include Allied, ARCO, GTE and Xerox.

David B. Solomon, president, is chief investment officer. Client contact is Marianne G. Murphy, vice president-marketing.

Somerset Asset Management

441 Lexington Ave., New York, N.Y. 10017; (212) 679-5357

Total assets managed	$22,000,000
Tax-exempt assets managed	$18,000,000
Minimum separate account	$500,000
Tax-exempt clients	3
No. of portfolio managers	2

Somerset Asset Management is an equity manager with a strong value orientation to the selection of small and medium-sized companies. Market timing is used to limit risk.

The Jan. 1 tax-exempt asset mix was 89% stocks and 11% cash.

Managers follow 50 stocks closely and 200, generally; half of the research is generated internally.

Donald A. Herman, president, is chief investment officer. James A. Goble, senior vice president, is client contact.

Southeastern Asset Management Inc.

860 Ridgelake Blvd., Suite 301, Memphis, Tenn. 38119; (901) 761-2474

Total assets managed	$718,000,030
Tax-exempt assets managed	$464,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	58
Types of accounts managed	CEFGJ
No. of portfolio managers	3

Equity manager Southeastern Asset Management Inc. seeks stocks priced significantly below the intrinsic worth of the business as determined by liquidating value, cash generating ability and comparable sales price. It prefers management ownership and minimal institutional interest. Options are used.

Fixed-income securities are used for stability. The firm rarely invests beyond intermediate maturities.

The Jan. 1 tax-exempt asset mix was 65% stocks, 15% bonds and 20% cash.

Clients include Florida, University of Alabama, Flowers Industries and Chattanooga.

Mason Hawkins, president, is chief investment officer. Frank Stanley III, vice president, is client contact.

Sovran Bank

12th & Main Streets, Richmond, Va. 23219; (804) 788-3545

Total assets managed	$2,913,000,000
Tax-exempt assets managed:	
Total	$521,000,000
Commingled accounts	$164,000,000
Separate accounts	$357,000,000
International assets managed	$2,000,000
401(k) and 457 assets managed	$9,000,000
Minimum separate account	$250,000
Tax-exempt clients:	
Commingled	277
Separate	253
Types of accounts managed	CEFG
No. of portfolio managers	11
Size of research staff	4

Sovran Bank is an equity, fixed-income and balanced manager.

The bank stresses active equity management seeking undervalued, low-multiple issues with improving fundamentals that would warrant p/e expansion.

In fixed-income, the bank concentrates on undervalued sectors, correct duration decisions and positioning of the portfolio on the yield curve's most attractive part.

The Jan. 1 tax-exempt asset mix was 45% stocks, 43% bonds and 12% cash.

Managers follow 65 stocks closely and 800, generally; 40% of research is generated internally.

The bank is affiliated with Sovran Capital Management.

Robert V. Callahan, senior vice president, is chief investment officer. Dewey E. Brown Jr., vice president, is client contact.

Sovran Capital Management

P.O. Box 26469, Richmond, Va. 23261; (804) 788-3116

Total assets managed	$1,206,000,000
Tax-exempt assets managed:	
Total	$987,000,000
Commingled accounts	$139,000,000
Separate accounts	$848,000,000
Real estate assets managed	$30,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	463
Separate	42
Types of accounts managed	CEFG
No. of portfolio managers	5

Sovran Capital Management Corp. is an equity, fixed-income, balanced and short-term manager.

In equities, the bank emphasizes consistency of return through diversified portfolios of lower p/e issues screened for financial quality. Options are used.

The fixed-income approach concentrates on undervalued sectors; managers make moderate duration changes.

The Jan. 1 tax-exempt asset mix was 29% stocks, 67% bonds, 1% cash and 3% mortgage-backed securities.

Managers follow 60 stocks closely and 800, generally; 40% of research is generated internally.

Clients include Bell Atlantic, D.C. Retirement Fund, Ethyl and CSX.

Stuart Sachs, president, is chief investment officer. Tom Crowder, vice president, is client contact.

Denver Investment Advisors, Inc.

633 Seventeenth Street; Suite 1800
Post Office Box 17487
Denver, Colorado 80217

Dennis E. Larkin
Vice President
(303) 293-5588

Equity ■ Balanced ■ Fixed Portfolios

F.A. Spina & Co. Inc.

1660 Walt Whitman Road, Melville, N.Y. 11747; (516) 293-3666

Total assets managed	$10,000,000
Tax-exempt assets managed	$7,000,000
Minimum separate account	$25,000
Tax-exempt clients	20
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	3

F.A. Spina & Co. is an equity manager stressing growth stocks in assembling and managing individually selected portfolios of no-load mutual funds.

Portfolios are shifted to money market funds when necessary.

The Jan. 1 tax-exempt asset mix was 7% cash and 93% no-load mutual funds.

Frank A. Spina, chairman and chief executive officer, is chief investment officer. Alan J. Levinsohn, president and chief operating officer, is client contact.

George B. Springman Inc.

44 Montgomery St., San Francisco, Calif. 94104; (415) 362-5005

Total assets managed	$150,000,000
Tax-exempt assets managed	$150,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	3
Types of accounts managed	G
No. of portfolio managers	1

George B. Springman Inc. is an equity manager that takes a conservative approach using low p/e and Graham & Dodd methods to preserve capital.

The Jan. 1 tax-exempt asset mix was 90% stocks and 10% cash.

Managers follow 50 stocks closely and 250, generally; 35% of research is generated internally.

Clients include Contra Costa County and San Francisco City & County Employees.

George B. Springman, president, is chief investment officer and client contact.

Standish, Ayer & Wood Inc.

1 Financial Center, Boston, Mass. 02111; (617) 350-6100

Total assets managed	$5,541,000,000
Tax-exempt assets managed	$2,386,000,000
International assets managed	$18,000,000
Passive assets managed	$100,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	96
Types of accounts managed	CEFG
No. of portfolio managers	21
Size of research staff	2

Standish, Ayer & Wood is an equity, fixed-income and balanced manager.

In equities, the firm uses a contrarian value/growth approach stressing fundamental analysis. Managers prefer medium-cap stocks.

The fixed-income approach concentrates on sector analysis and the use of novel instruments within an intermediate maturity range.

Options and fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 32.6% stocks, 62.3% bonds and 5.1% cash.

Managers follow 300 stocks closely. All research is generated internally.

Clients include AT&T, Monsanto, Boston Symphony Orchestra and Northwest Airlines.

D. Barr Clayson, managing director, is chief investment officer. John P. Wilkins, managing director, is client contact.

Starwood Corp.

100 Park Ave., New York, N.Y. 10017; (212) 679-3620

Total assets managed	$65,000,000
Tax-exempt assets managed	$55,000,000
401(k) and 457 assets managed	$3,000,000
Minimum separate account	$500,000
Tax-exempt clients	16
Types of accounts managed	CEF
No. of portfolio managers	3
Size of research staff	5

Starwood Corp. has equity and fixed-income capabilities and combines several strategies to achieve optimal return.

Options, stock index futures and fixed-income futures are used.

Managers follow 5,000 stocks closely and 500, generally. All research is generated internally.

Andrew E. Beer, president, is chief investment officer. Jack R. Orben, chairman, is client contact.

State Mutual Life Assurance Co. of America

440 Lincoln St., Worcester, Mass. 01605; (617) 852-1000

Total assets managed	$3,464,000,000
Tax-exempt assets managed:	
Total	$1,775,000,000
Pooled accounts	$102,000,000
401(k) and 457 assets managed	$50,000,000
GICs	$801,000,000
Annuities	$30,000,000
Other	$842,000,000
Minimum separate account	$15,000,000
Types of accounts managed	CG

The State Mutual Life Assurance Co. of America offers equity, fixed-income and balanced capabilities.

Managers emphasize growth stock in their equity approach and are passive, fixed-income managers.

The tax-exempt asset mix Jan. 1 was 59% stocks, 11% bonds, 25% cash and 5% mortgage-backed securities.

SMA Equities is a subsidiary. The parent and subsidiary have total assets of $4.923 billion.

Edmund T. Bennett, senior vice president, is chief investment officer. Client contact is Alden Hammond, second vice president.

State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 654-3236

Total assets managed	$14,454,000,000
Tax-exempt assets managed:	
Total	$12,252,000,000
Commingled accounts	$7,202,000,000
Separate accounts	$5,050,000,000
Real estate assets managed	$1,047,000,000
International assets managed	$957,000,000
401(k) and 457 assets managed	$1,995,000,000
Passive assets managed	$4,076,000,000
Tax-exempt clients:	
Commingled	670
Separate	110
Types of accounts managed	CEFGJ
No. of portfolio managers	28
Size of research staff	11

State Street Bank and Trust Co. is an equity, fixed-income, balanced, real estate, international and futures and options manager.

Equity portfolios are structured to match specific benchmarks, including variations on the S&P 500.

The fixed-income approach emphasizes intelligent risk management for active, immunized, dedicated and indexed portfolios.

The bank specializes in using financial futures to alter asset allocation and risk profile.

In real estate, the bank offers a series of closed-end, commingled funds that primarily employ debt instruments with equity participation in tax-efficient, hedged interests in commercial, industrial and retail property.

The Jan. 1 tax-exempt asset mix was 30% stocks, 19% bonds, 35% cash, 2% equity real estate, 7% mortgage-backed securities, 3% futures and 4% GICs.

Lyle H. Davis, senior vice president, is chief investment officer. Harry Sterling Jr., vice president, is client contact.

State Street Research & Management Co.

225 Franklin St., Boston, Mass. 02110; (617) 482-3920

Total assets managed	$12,528,000,000
Tax-exempt assets managed	$11,555,000,000
Types of accounts managed	CEF
No. of portfolio managers	12

State Street Research & Management Co. is known for its strong fundamental research in equity management. The bottom-up approach focuses on high-quality stocks.

The firm is a subsidiary of Metropolitan Life Insurance Co. and is affiliated with Metropolitan Life Insurance Co. of Canada.

George F. Bennett is chairman of the board. Charles Smith Jr. is president and chief executive officer.

Stein Roe & Farnham

1 S. Wacker Drive, Chicago, Ill. 60606; (312) 368-7632

Total assets managed	$10,800,000,000
Tax-exempt assets managed	$4,600,000,000

When Burroughs computed a need for a Master Trust, who did they bring on line?

In the rapidly evolving computer industry, a company needs to move forward simply to stay even. So when you're a leader like Burroughs, you need a master trustee to be as dynamic and responsive as you are. That's why they called in Harris Bank.

As with every Harris Master Trust, we committed a team of professionals to the Burroughs account. A team that developed and continues to maintain a thorough knowledge of Burroughs' business. To understand their needs. And anticipate their changes.

For Burroughs, that meant a smooth pension fund reorganization. And asset reallocation.

Our responsive, team-oriented approach was the perfect program for Burroughs. See if it computes for your Master Trust, too. Call our Marketing Representative, Mr. Walter J. Kowalczyk, at (312) 461-7625.

The Harris. Move up to the Banking Lion.

Harris Trust and Savings Bank, 111 W. Monroe St., Chicago, IL 60603. Member FDIC, Federal Reserve System.

Real estate assets managed	$130,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	680
Types of accounts managed	CEFGJ
No. of portfolio managers	45
Size of research staff	24

Stein Roe & Farnham is an equity, fixed-income and balanced manager.

The equity approach uses growth stock, emerging growth, sector rotation and market timing. A 6,500-company data base is used in the decision-making process.

The fixed-income approach uses maturity optimization, sector rotation and credit selection with a bias toward capital preservation during downturns.

Options, stock index futures and fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 44% stocks, 44% bonds, 10% cash and 2% mortgage-backed securities.

Managers follow 600 stocks closely and 6,500, generally; 90% of research is generated internally.

L. Hickey is chief investment officer. R.L. Ford is client contact.

Stephens Capital Management

114 E. Capitol Ave., Little Rock, Ark. 72201; (501) 374-4361

Total assets managed	$229,000,000
Tax-exempt assets managed	$144,000,000
401(k) and 457 assets managed	$9,000,000
Minimum separate account	$500,000
Tax-exempt clients	70
Types of accounts managed	CEF
No. of portfolio managers	5
Size of research staff	4

Stephens Capital Management is an equity manager emphasizing growth stocks. Its fixed-income approach is passive.

The Jan. 1 tax-exempt asset mix was 66.5% stocks, 15.5% bonds and 18% cash.

The firm is a subsidiary of Stephens Inc.

Sanford M. Besser, vice president, is chief investment officer and client contact.

Sterling Capital Management

1770 Independence Center, Charlotte, N.C. 28246; (704) 372-8670

Total assets managed	$772,000,000
Tax-exempt assets managed	$587,000,000
401(k) and 457 assets managed	$25,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	107
Types of accounts managed	CEF
No. of portfolio managers	4

Sterling Capital Management is an equity manager.

Its approach is based on market timing. The firm will invest in alternative vehicles if they offer more attractive opportunities than equities.

The Jan. 1 tax-exempt asset mix was 23% stocks, 30% bonds and 47% cash.

Managers follow 200 stocks closely and 200, generally; half the research is generated internally.

Clients include Bowater, Jim Walter Corp., Wake Forest University and Dean Witter Reynolds.

The firm is owned by United Asset Management Co.

W. Olin Nisbet, president, is chief investment officer. Harry F. Wolfe Jr., vice president, is client contact.

Stock Yards Bank & Trust

P.O. Box 32890, Louisville, Ky. 40232; (502) 582-2571

Total assets managed	$339,000,000
Tax-exempt assets managed:	
Total	$240,000,000
Separate accounts	$240,000,000
Minimum separate account	$100,000
Tax-exempt clients	287
Types of accounts managed	CEG
No. of portfolio managers	5

Stock Yards Bank & Trust Co. is an equity, fixed-income and balanced manager specializing in aggressive options strategies.

Its equity approach calls for investments in high-quality, defensive common stocks and covered call options.

In fixed income, managers stress government securities and write call options against the portfolio.

As of Jan. 1, all tax-exempt assets were in stocks.

Managers follow 100 stocks closely.

R. Keith Cullinan, executive vice president, is chief investment officer and client contact.

Stratton Capital Management

6400 High Drive, Mission Hills, Kan. 66208; (913) 677-0743

Total assets managed	$2,000,000
Tax-exempt assets managed	$1,000,000
Minimum separate account	$50,000
Tax-exempt clients	5
Types of accounts managed	C
No. of portfolio managers	1

Stratton Capital Management Inc. is an equity and balanced manager.

Technical analysis is the cornerstone of the equity approach. Market timing is also used.

In fixed income, high quality is stressed and average maturity is altered in anticipation of interest rate changes.

The Jan. 1 tax-exempt asset mix was 70% stocks, 20% bonds and 10% cash.

John Stratton, president, is chief investment officer and client contact.

Strong/Corneliuson Capital Management Inc.

815 E. Mason St., Milwaukee, Wis. 53202; (414) 765-0620

Total assets managed	$1,802,000,000
Tax-exempt assets managed	$1,297,000,000
401(k) and 457 assets managed	$120,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	82
Types of accounts managed	CEFJ
No. of portfolio managers	2
Size of research staff	1

Strong/Corneliuson Capital Management Inc. is an equity and balanced manager.

In equities, a macroeconomic perspective is used to determine equity/fixed portfolio balance and to determine attractive equity groups. Specific equities are selected based on conventional cash flow analysis and heavy field research.

In fixed income, cash flow and sensitivity analyses are used to select specific bonds.

Options, stock index futures and fixed income futures are used.

The Jan. 1 tax-exempt asset mix was 65% stocks, 30% bonds and 5% cash.

Managers follow 100 stocks closely and 300, generally; 75% of research is generated internally.

Richard S. Strong, chairman, and William D. Corneliuson, director, are chief investment officers. Bruce D. Behling, president, and Mr. Corneliuson are client contacts.

Stuyvesant Capital Management Corp.

50 Broad St., New York, N.Y. 10004; (212) 422-8773

Total assets managed	$120,000,000
Tax-exempt assets managed	$102,000,000
Minimum separate account	$300,000
Tax-exempt clients	22
Types of accounts managed	CEFJ
No. of portfolio managers	4

Stuyvesant Capital Management Corp. is an equity, fixed-income and balanced manager.

The equity approach uses Graham & Dodd and market-timing methods. In fixed income, interest rate forecasts and sector analysis are used.

The Jan. 1 tax-exempt asset mix was 45% stocks, 50% bonds and 5% cash.

Clients include Philadelphia Bakery Union, New York City Transit Police, Main Hurdman and Gleason Memorial Fund.

Donald von Wedel, managing director, is chief investment officer and client contact.

Master trust profiles: June 23

STW Fixed Income Management

1165 Coast Village Road, Santa Barbara, Calif. 93108; (805) 565-1625

Total assets managed	$1,722,000,000
Tax-exempt assets managed	$1,465,000,000
Passive assets managed	$15,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	42
Types of accounts managed	CEFGJ
No. of portfolio managers	2
Size of research staff	2

STW Fixed Income Management is a fixed-income adviser that does fundamental, value-oriented and non-market-timing management of short- and long-term assets.

As of Jan. 1, all tax-exempt assets were in bonds.

Clients include Ashland Oil, Borg-Warner, United Mine Workers of America and McGraw-Hill.

William H. Williams III, principal, is chief investment officer. Arnold P. Boecklin, principal, is client contact.

Sullivan, Morrissey & Mickle Capital Management Corp.

450 Park Ave., Suite 2003, New York, N.Y. 10022; (212) 832-7440

Total assets managed	$105,000,000
Tax-exempt assets managed	$72,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	17
Types of accounts managed	CJ
No. of portfolio managers	3

Sullivan, Morrissey & Mickle Capital Management Corp. is an equity manager using a value/growth approach to invest in highly profitable companies that reinvest a majority of their earnings and sell at low market prices.

The Jan. 1 tax-exempt asset mix was 90% stocks and 10% cash.

John F. Sullivan, chairman, is chief investment officer. James C. Vogelzang, president, Vogelzang & Associates, P.O. Box 890, Calistoga, Calif. 94515 is client contact.

Sumitomo Bank of California

Trust Department, P.O. Box 3949, San Francisco, Calif. 94119; (415) 445-8090

Total assets managed	$23,000,000
Tax-exempt assets managed:	
Total	$8,000,000
Separate accounts	$8,000,000
Tax-exempt clients	10
Types of accounts managed	C
No. of portfolio managers	1

Sumitomo Bank of California is a balanced manager, basing its equity approach on Graham & Dodd and its fixed-income approach on interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 53% stocks, 2% bonds and 45% cash.

Managers follow 50 stocks closely.

Edward H. Turner Jr., assistant vice president and trust investment officer, is chief investment officer and client contact.

Summit Management Co.

515 S. Figueroa St., Suite 1050, Los Angeles, Calif. 90071; (213) 627-3319

Total assets managed	$362,000,000
Tax-exempt assets managed	$148,000,000
401(k) and 457 assets managed	$25,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	27
Types of accounts managed	CEF
No. of portfolio managers	5
Size of research staff	2

Summit Management Co. is a balanced manager.

The equity approach concentrates on sectors undergoing price revaluation in response to changing market themes (inflation, hedging and disinflation).

The fixed-income approach uses maturity selection, credit analysis and underdeveloped/overlooked securities.

The Jan. 1 tax-exempt asset mix was 20% stocks, 64% bonds and 16% cash.

Robert M. Raney is chief investment officer. Franklin E. Ulf, president, is client contact.

Sun Bank

P.O. Box 3808, Orlando, Fla. 32802; (305) 237-4362

Total assets managed	$2,000,000,000
Tax-exempt assets managed:	
Total	$600,000,000
Commingled accounts	$180,000,000
Separate accounts	$420,000,000
Real estate assets managed	$23,000,000
401(k) and 457 assets managed	$25,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	320
Separate	60
Types of accounts managed	CEFG
No. of portfolio managers	5
Size of research staff	2

Sun Bank is an equity, balanced and real estate manager.

Its equity approach emphasizes business cycle, sector rotation and stock selection. Its fixed-income approach is passive.

The Jan. 1 tax-exempt asset mix was 50% stocks, 30% bonds, 10% cash and 10% equity real estate.

Managers follow 80 stocks closely and 150, generally; 10% of research is generated internally.

Clients include Florida, Houston Police and the Oklahoma law enforcement system.

Anthony R. Gray, executive vice president, is chief investment officer. Victor A. Zollo Jr., senior vice president, is client contact.

Sutro Capital Management

201 California St., San Francisco, Calif. 94111; (415) 445-8530

Total assets managed	$63,000,000
Tax-exempt assets managed	$33,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	18
Types of accounts managed	C
No. of portfolio managers	2

Sutro Capital Management is an equity and balanced manager.

In equities, a long-term, conservative orientation stressing value, total return and the preservation of capital is used. Securities selection is theme/sector directed.

Managers use a long-term, conservative basic approach to fixed income. High-quality securities are used to take advantage of expected trends.

The Jan. 1 tax-exempt asset mix was 50% stocks, 30% bonds and 20% cash.

Lewis H. Katcher, director, is chief investment officer and client contact.

Swiss American Asset Management International

280 Park Ave., 27th Floor East, New York, N.Y. 10017; (212) 557-0510

Total assets managed	$45,000,000
Tax-exempt assets managed	$23,000,000
International assets managed	$14,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	3
Types of accounts managed	C
No. of portfolio managers	3
Size of research staff	7

Swiss American Asset Management International is an international manager.

The equity approach combines fundamental analysis with worldwide growth orientation, international investment themes and country/currency asset allocation. Currency futures and options are used.

The Jan. 1 tax-exempt asset mix was 90% stocks and 10% cash.

Gordon L. Bowyer, president, is chief investment officer. Richard R. Smith, vice president, is client contact.

Systematic Financial Management Inc.

2 Executive Drive, Fort Lee, N.J. 07024; (201) 585-9290

Total assets managed	$40,000,000
Tax-exempt assets managed	$33,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	10
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	3

Systematic Financial Management Inc. is an equity manager stressing systematic purchases of undervalued companies with superior cash flows.

The Jan. 1 tax-exempt asset mix was 90% stocks and 10% cash.

Managers follow 100 stocks closely and 600, generally. All research is conducted in-house.

Kenneth S. Hackel is chief investment officer and client contact.

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Tallasi Management Co.

1 Battery Park Place, New York, N.Y. 10004; (212) 248-3090

Total assets managed	$424,000,000
Tax-exempt assets managed	$415,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	34
Types of accounts managed	CEJ
No. of portfolio managers	3

Tallasi Management Co. is an equity manager.

The equity approach uses industry/sector concentration based on macroeconomic analysis. Individual, value-oriented and defensive stock selection combines rigorous valuation criteria with intensive company research. Low p/e, sector rotation and Graham & Dodd analysis are used.

The asset mix Jan. 1 was 90% stocks, 2% bonds and 8% cash.

Clients include Boy Scouts of America, Santa Fe Southern Pacific, Skidmore College and Williams Co.

Rodney Mitchell, president, is chief investment officer. William O. Badger, marketing director, is client contact.

Tamarack Investment Counsel Inc.

P.O. Box 1924, Stockton, Calif. 95201; (209) 951-1120

Total assets managed	$30,000,000
Tax-exempt assets managed	$10,000,000
Real estate assets managed	$3,500,000
Minimum separate account	$250,000
Tax-exempt clients	13
Types of accounts managed	CJ
No. of portfolio managers	2
Size of research staff	1

Tamarack Investment Counsel Inc. is a balanced manager.

The firm seeks growth opportunities to purchase stock and real estate at or below book value. Options are used. The fixed-income approach uses interest rate anticipation. The Monterey Peninsula is targeted for real estate.

The asset mix Jan. 1 was 38% stocks, 2% bonds, 25% cash, 25% equity real estate and 10% mortgages.

Clients include Kaiser, Perry Farming and McCormick.

Paul F. Soares, investment counsel, is chief investment officer. David M. Soares, investment counsel, is client contact.

Target Investors Inc.

100 Prospect St., Century Plaza South, Stamford, Conn. 06901; (203) 359-0600

Total assets managed	$110,000,000
Tax-exempt assets managed	$110,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	8
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Target Investors Inc. is an equity manager.

The firm invests in small- to medium-sized companies having relatively low p/e, strong balance sheets and positive earnings surprise potential. All research is internal.

The Jan. 1 tax-exempt asset mix was 97% stocks and 3% cash.

Clients include Allied-Signal, Champion International and Electrical Supplies.

Robert Zuccaro, president, is chief investment officer. He and Mary Jane Boyle, vice president, are client contacts.

Technological Investors Management Corp.

630 Third Ave., New York, N.Y. 10017; (212) 490-2600

Total assets managed	$40,000,000
Tax-exempt assets managed	$20,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	10
Types of accounts managed	CF
No. of portfolio managers	3

Technological Investors Management Corp. is an equity manager that invests in carefully chosen securities,

emerging or changing technological trends.

Its fixed-income approach is passive.

The asset mix Jan. 1 was 80% stocks and 20% bonds.

Clients include Estee Lauder and Golodetz.

Raymond Frankel, president, is chief investment officer. Gary L. Shields, vice president, is client contact.

Tel Advisors Inc.

29 Broadway, New York, N.Y. 10006; (212) 248-2178

Total assets managed	$2,000,000
Tax-exempt assets managed	$500,000
Minimum separate account	$250,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	1

Tel Advisors Inc. is an equity manager.

Its equity approach focuses primarily on medium-sized growth stocks, adjusting between equities and cash based on technical analysis.

In fixed income, the firm uses government issues only and tries to focus on the most advantageous areas of the yield curve.

The asset mix Jan. 1 was 80% stocks, 10% bonds and 10% cash.

Theodore E. Loud, president, is chief investment officer and client contact.

Templeton International

P.O. Box N-7776, Nassau, Bahamas; (809) 326-4600

Total assets managed	$6,966,000,000
Tax-exempt assets managed	$1,857,000,000
International assets managed	$650,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	43
Types of accounts managed	CEFGJ
No. of portfolio managers	9

Templeton International is a global equity manager.

The firms equity approach uses fundamental security analysis and a series of screening procedures to identify issues selling for less than their true value.

The asset mix Jan. 1 was 90% stocks, 5% bonds and 5% cash.

In 1985, the firm realized a $148 net gain in new tax-exempt business. Fourteen clients were added.

John Marks Templeton is chief investment officer. Michael G. Landry, senior vice president, is client contact.

Tenneco Asset Management

P.O. Box 2511, Houston, Texas 77001; (713) 757-5462

Total assets managed	$3,000,000,000
Tax-exempt assets managed:	
Total	$750,000,000
Pooled accounts	$50,000,000
Separate accounts	$700,000,000
401(k) and 457 assets managed	$50,000,000
GICs	$400,000,000
Annuities	$80,000,000
Indexed/dedicated assets	$200,000,000
Minimum separate account	$1,000,000
Types of accounts managed	CJ
No. of portfolio managers	4
Size of research staff	3

Tenneco Asset Management Co. is an equity, fixed-income and balanced manager.

The equity approach emphasizes sector rotation with a growth bias.

Sector analysis is used in the firm's fixed-income approach.

The asset mix Jan. 1 was 35% stocks, 60% bonds and 5% cash.

Clients include Tenneco Inc., Philadelphia Life, Southwestern Life and Gill Savings & Loan.

Seventy-five stocks are followed closely and 300, generally; 15% of research is generated in-house.

Edward Jaroski, executive vice president, is chief investment officer. Client contact is Scot Brothers.

Texas American Investment Management Inc.

P.O. Box 2050, Fort Worth, Texas 76113; (817) 338-8436

Total assets managed	$2,713,000,000
Tax-exempt assets managed	$622,000,000
Real estate assets managed	$66,000,000
401(k) and 457 assets managed	$10,000,000
Minimum separate account	$500,000
Tax-exempt clients	283
Types of accounts managed	CEFGJ
No. of portfolio managers	6

Texas American Investment Management Inc. is an equity, fixed-income, balanced and real estate manager.

Its equity approach uses sector rotation with growth emphasis. Managers also track low p/e and undervalued equities.

In fixed income, managers use high-quality, predominantly industrial issues with maturities of less than 10 years. Premium bonds are generally avoided.

In real estate, it invests in high-quality, income-producing properties, with an intensive management program to preserve and enhance value.

The Jan. 1 tax-exempt asset mix was 52% stocks, 13% bonds, 23% cash, 4% equity real estate, 2% mortgages and 6% mortgage-backed securities.

Harold Achziger, president, is chief investment officer. Dave Holland, vice president, is client contact.

Texas Commerce Bank

P.O. Box 2558, Houston, Texas 77252-8032; (713) 236-4497

Total assets managed	$7,600,000,000
Tax-exempt assets managed:	
Total	$2,686,000,000
Commingled accounts	$690,000,000
Separate accounts	$1,996,000,000
401(k) and 457 assets managed	$60,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Commingled	67
Separate	144
Types of accounts managed	CEFGJ
No. of portfolio managers	12
Size of research staff	7

Texas Commerce Bank is an equity, fixed-income and balanced manager with real estate and oil and gas capabilities.

Its equity approach is value oriented with a growth bias based on fundamental quantitative and qualitative analysis.

Bond portfolios are actively managed using all available tools as markets dictate, consistent with client objectives.

Its real estate approach is income-oriented with equity opportunities.

The Jan. 1 tax-exempt asset mix was 65% stocks, 30% bonds and 5% cash.

Managers follow 175 stocks closely and 300, generally; 25% of research is generated internally.

Clients include Houston Chronicle, Houston Firemen and Shell Oil.

Geoffrey P. Raymond, executive vice president, is chief investment officer. William Wagner, director of marketing, is client contact.

Third National Bank

201 Fourth Ave. N., Nashville, Tenn. 37244; (615) 748-4391

Total assets managed	$1,500,000,000
Tax-exempt assets managed:	
Total	$630,000,000
Commingled accounts	$89,000,000
Separate accounts	$541,000,000
Real estate assets managed	$13,000,000
International assets managed	$2,000,000
401(k) and 457 assets managed	$50,000,000
Passive assets managed	$3,000,000
Minimum separate account	$250,000
Tax-exempt clients:	
Commingled	8
Separate	463
Types of accounts managed	CEFGJ
No. of portfolio managers	8

Third National Bank is an equity, fixed-income, balanced, real estate and international manager.

The equity strategy is based on sector rotation.

Sector and industry emphasis shifts through the business cycle. Options and fixed-income futures are used.

In fixed income, managers try to forecast interest rate direction for the next 90 days. It had $3 million in bond index funds Jan. 1.

In real estate, the bank invests in Southeastern properties $1 million to $5 million in second- and third-tier cities.

Investment types are either ownership or hybrid debt.

The Jan. 1 tax-exempt asset mix was 23% stocks, 53.5% bonds, 20% cash, 3% equity real estate and 0.5% mortgages.

The bank is affiliated with American National Bank and Hamilton National Bank.

Charles E. Winger, senior vice president, is chief investment officer. Larry Gibson, vice president, is client contact.

What's the point of no returns?

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And if you don't get those returns, there's not much point in using an investment team at all.

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Asset Management Division
AMERICAN FLETCHER NATIONAL BANK
AFNB
Indianapolis, Indiana 46277

THE ADVANTAGE IS YOURS.

Thompson/Rubinstein Investment Management

715 S.W. Morrison, Suite 604, Portland, Ore. 97205; (503) 224-1488

Total assets managed	$215,000,000
Tax-exempt assets managed	$123,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	49
Types of accounts managed	CEFGJ
No. of portfolio managers	3
Size of research staff	1

Thompson/Rubinstein Investment Management is an equity, fixed-income and balanced manager.

The firm is a bottom-up equity manager investing in the inefficient sector of the market. Its fixed-income philosophy uses interest rate anticipation, and its portfolios favor U.S. government securities.

The mix of tax-exempt assets Jan. 1 was 76% stocks and 24% bonds.

F.L. Thompson and Richard A. Rubinstein are the chief investment officers. Client contact is Tim F. Ellis, vice president.

Thompson, Siegel & Walmsley Inc.

5000 Monument Ave., Richmond, Va. 23230; (804) 353-4500

Total assets managed	$2,000,000,000
Tax-exempt assets managed	$1,800,000,000
401(k) and 457 assets managed	$100,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	4

Thompson, Siegel & Walmsley Inc. is an equity and balanced manager.

The firm pursues a conservative, risk-averse, value-oriented approach incorporating economic top-down analysis, valuation and fundamental security analysis and asset allocation tools as building block disciplines in its decision-making process.

The fixed-income approach is conservative and risk-averse, incorporating economic top-down analysis, fundamental credit analysis and sector spread analysis. Average maturities range from four to 12 years; quality is emphasized.

The asset mix Jan. 1 was 60% stocks, 25% bonds and 15% cash.

The firm is owned by United Asset Management.

Clients include Burlington Northern, Burroughs Wellcome, James River and Pacific Telesis.

Matthew G. Thompson, John T. Siegel, S. Pierce Walmsley and David A. Charnes are chief investment officers and client contacts.

Thorson, Brown & Plunkett

43 Arch St., Greenwich, Conn. 06830; (203) 661-0666

Total assets managed	$303,000,000
Tax-exempt assets managed	$65,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	25
Types of accounts managed	CEF
No. of portfolio managers	5

Thorson, Brown & Plunkett Inc. is an equity manager with a balanced fund capability.

The firm's equity approach is theme-oriented, emphasizing small to medium companies with above-average earnings growth potential, underowned institutionally and presently undervalued.

For fixed income, bonds and convertibles may be used as equity alternatives or as a complement in a balanced fund. Interest rate anticipation is used.

The asset mix Jan. 1 was 65% stocks and 35% bonds and cash.

Chief investment officers are Peter A. Thorson and John H. Plunkett, managing directors. Client contact is Pegeen M. Burgess, vice president-director of marketing.

Timmins & Associates Ltd.

130 Adelaide St. West, P.O. Box 1160, Station A, Toronto, Ontario M5W 1G5; (416) 364-5620

Total assets managed	$1,180,000,000(U.S.)
Tax-exempt assets managed:	
Total	$960,000,000
For subsidiaries of U.S. firms	$320,000,000
Real estate assets managed	$40,000,000
International assets managed	$100,000,000
Minimum separate account	$2,000,000
Tax-exempt clients:	
Total	49
U.S. subsidiaries	7
Types of accounts managed	CEFU
No. of portfolio managers	8
Size of research staff	3

Timmins & Associates Ltd., a Canadian firm, is an equity, fixed-income, balanced and asset mix manager.

The firm relies on growth stock, low p/e and Graham & Dodd principles in its equity approach.

It uses sector analysis and interest rate anticipations in its fixed-income approach. The firm extends the range of debt securities to less traditional sectors of the bond markets and restructures portfolios to capitalize on yield curves, sector spreads and coupon levels.

The asset mix Jan. 1 was 40% Canadian stocks, 40% bonds, 8% cash, 2% real estate and 10% U.S. stocks.

Jean-Guy Desjardins, president, is chief investment officer and client contact.

Todd Investment Advisors

3160 First National Tower, Louisville, Ky. 40202; (502) 585-3121

Total assets managed	$1,933,000,000
Tax-exempt assets managed	$1,922,000,000
Real estate assets managed	$225,000,000
401(k) and 457 assets managed	$8,000,000
Passive assets managed	$55,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	28
Types of accounts managed	CEFGJ
No. of portfolio managers	4

Todd Investment Advisors Inc. is a fixed-income and balanced manager.

In equities, emphasis is placed on a large-cap, low beta universe with aggressive shifts between sectors and industries.

The firm's fixed-income approach emphasizes aggressive maturity changes in portfolios based on proprietary interest rate forecasting techniques.

The asset mix Jan. 1 was 30% stocks, 53% bonds, 12% mortgage-backed securities and 5% cash.

The firm manages $55 million in equity index funds.

Clients include Kentucky Teachers Retirement, Fort Howard Paper, Memphis and Ohio Casualty Insurance Co.

Chief investment officer is Bosworth M. Todd Jr., president. Client contact is C. Prewitt Lane Jr., executive vice president.

Toronto Investment Management

P.O. Box 75, Royal Bank Plaza, North Tower, 14th Floor, Toronto, Ontario M5J 2J2; (416) 865-0731

Total assets managed	$2,100,000,000(U.S.)
Tax-exempt assets managed:	
Total	$1,700,000,000
For subsidiaries of U.S. firms	$800,000,000
Real estate assets managed	$40,000,000
International assets managed	$50,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	62
U.S. subsidiaries	26
Types of accounts managed	CEFU
No. of portfolio managers	10
Size of research staff	1

Toronto Investment Management, a Canadian firm, is an equity, fixed-income and balanced manager.

In equities, the firm uses fundamental analysis with emphasis on stock selection, growth stocks, low p/e and market timing.

In fixed income, managers use interest rate forecasts and sector analysis.

The asset mix Jan. 1 was 33% Canadian stocks, 50% bonds, 5% cash, 2% equity real estate, 6% U.S. stocks and 4% non-North American equity.

The firm is affiliated with Montreal Investment Management, VanBrit Investment Management, European & Pacific Investment Management, Penreal Advisors and VenGrowth Capital Funds.

Chief investment officer is Gary V. Kondrat, vice president. William J. Smith, president, is client contact.

Torray Clark & Co.

Suite 450, 6610 Rockledge Drive, Bethesda, Md. 20817; (301) 493-4600

Total assets managed	$2,500,000,000
Tax-exempt assets managed	$2,500,000,000
Types of accounts managed	CEFGJ

Torray Clark & Co. is an equity and balanced manager, using a value-oriented equity approach. It manages some fixed income for balanced accounts.

All research is generated internally.

Chief investment officer is Robert Torray, president. Client contact is Allen D. White, vice president.

International advisers: Aug. 4.

Touche Remnant Pension Fund Management Ltd.

Mermaid House, 2 Puddle Dock, London, England EC4 V3AT; (01) 236-6565

Total assets managed	$4,350,000,000
Tax-exempt assets managed	$1,446,000,000
Real estate assets managed	$270,000,000
Tax-exempt clients	35
Types of accounts managed	C

Touche Remnant Pension Fund Management Ltd. is an international/global balanced manager.

In equities, the firm invests in high-growth companies with capable management and strong balance sheets.

The firm emphasizes fixed-income investment only when equity markets are governed by movements in interest rate. Interest rate anticipation is used.

For real estate, the company looks for entrepreneurial managements to add value even in a disinflationary economic climate.

The asset mix Jan. 1 was 66% stocks, 20% bonds, 9% equity real estate and 5% cash.

Clients include British Leyland, Ciba Geigy, Eli Lilly and Rolls Royce.

Chief investment officer and client contact is David H. Carter, director.

Tower Capital Management

30 Tower Lane, Avon, Conn. 06001; (203) 674-8800

Total assets managed	$194,000,000
Tax-exempt assets managed	$183,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	10
Types of accounts managed	CFG
No. of portfolio managers	2
Size of research staff	2

Tower Capital Management Inc. is an equity manager.

The firm is a conservative growth investor covering the investment spectrum from venture capital to small and medium-sized companies of rapid growth.

The tax-exempt asset mix Jan. 1 was 95% stocks and 5% cash.

Chief investment officers and client contacts are Roy C. McKay and Robert C. Knight, managing directors.

Townsend Asset Management Co. Inc.

P.O. Box 1110, 45 Essex St., Hackensack, N.J. 07602; (201) 646-1511

Total assets managed	$22,000,000
Tax-exempt assets managed	$4,000,000
Minimum separate account	$50,000
Tax-exempt clients	6
Types of accounts managed	CF
No. of portfolio managers	1
Size of research staff	1

Townsend Asset Management Co. Inc., an equity manager, buys equities of small companies that have below-average financial leverage relative to peer industry companies when available at prices less than their intrinsic, private worth. Its fixed-income approach is passive, and interest-rate bets are tightly controlled.

The asset mix Jan. 1 was 85% stocks, 10% bonds and 5% cash.

Chief investment officer and client contact is James W. Townsend, president.

Transamerica Investment Services

1150 S. Olive St., Los Angeles, Calif. 90015; (213) 742-3553

Total assets managed	$7,805,000,000
Tax-exempt assets managed	$3,354,000,000
Real estate assets managed	$1,557,000,000
Types of accounts managed	C
No. of portfolio managers	13

Transamerica Investment Services is a balanced manager.

The asset mix Jan. 1 was 5% stocks, 76% bonds, 2% cash and 17% mortgages.

The firm is a subsidiary of Transamerica Corp.

Gary U. Rolle, executive vice president, is chief investment officer. Jim Wilson is client contact.

Trascott, Alyson, Craig Inc.

P.O. Box 278, 222 Cedar Lane, Teaneck, N.J. 07666; (201) 836-9000

Total assets managed	$16,000,000
Tax-exempt assets managed	$7,000,000
Minimum separate account	$100,000
Tax-exempt clients	14
Types of accounts managed	C
No. of portfolio managers	2

Trascott, Alyson, Craig Inc. is a balanced manager.

The firm's equity strategy combines a long-term, value-oriented approach with yield, growth and timing considerations. Selected contrarian investments are made.

Fixed-income strategies focus on structuring portfolios to incorporate plan funding requirements with yield, safety of principal and liquidity considerations.

The asset mix Jan. 1 was 35% stocks, 45% bonds and 20% cash.

Tracy Shagin, vice president, is chief investment officer and client contact.

The Travelers Cos.

1 Tower Square, Hartford, Conn. 06183; (203) 277-2150

Total assets managed	$45,254,000,000
Tax-exempt assets managed:	
Total	$20,557,000,000
Pooled accounts	$1,355,000,000
Separate accounts	$1,656,000,000
Real estate assets managed	$501,000,000
International assets managed	$342,000,000
401(k) and 457 assets managed	$1,500,000,000
GICs	$8,000,000,000
Annuities	$2,050,000,000
Other	$7,265,000,000
Indexed/dedicated assets	$84,000,000
Minimum separate account	$5,000,000
Types of accounts managed	CEFGJ

The Travelers Cos., through its subsidiaries, is an equity, fixed-income, balanced, real estate, international and options and futures manager. It also has a timberland fund.

For real estate, the firm maintains the objectives of the portfolios through 100% ownership, all cash investments and an emphasis on high cash-yielding properties.

The asset mix Jan. 1 was 39% stocks, 14% bonds, 10% cash, 13% equity real estate, 3% mortgages and 21% options and futures.

The firm has $75 million in equity index funds and $9 million in dedicated or immunized portfolios.

Clients include Sperry, Phillips Petroleum, United Technologies and General Dynamics.

Chief investment officer is Richard Shima, executive vice president. Client contact is B. Thomas Willison, vice president.

The subsidiaries are Travelers Investment Management Co.; Travelers Keystone Fixed Income Advisers; and Travelers Hill Samuel International Ltd.

• TRAVELERS INVESTMENT MANAGEMENT had responsibility for $2.5 billion — $1.6 billion tax exempt — of the total assets under management Jan. 1.

The firm has equity, balanced, options and futures capabilities. For equity investing, it uses a bottom-up approach to identify and analyze each security for its relative attraction from both a quantitative and qualitative standpoint.

The asset mix Jan. 1 was 50% stocks, 6% bonds, 8% cash and 36% options and futures.

• TRAVELERS KEYSTONE FIXED INCOME ADVISERS had responsibility for $1.5 billion, of which $119 million is tax exempt.

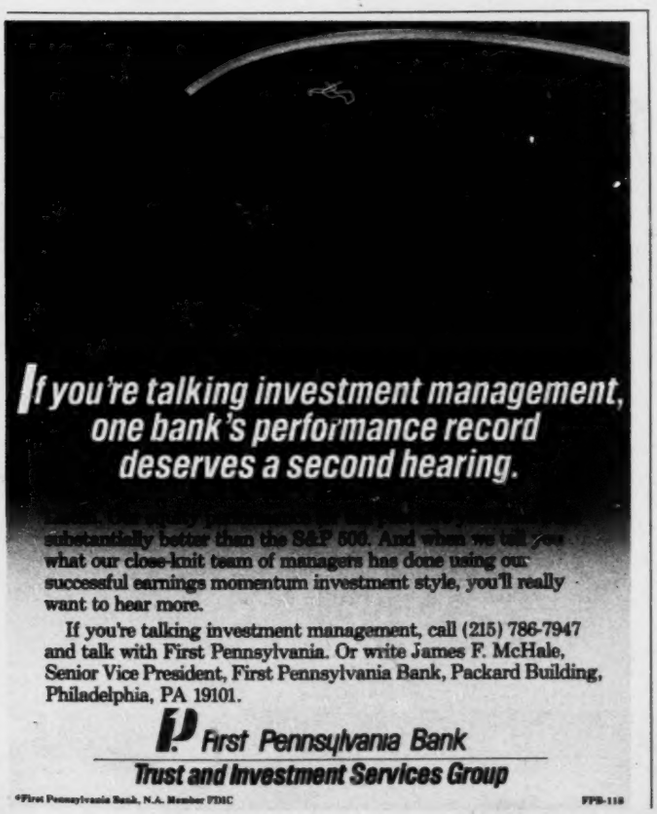
The primary focus of the firm's fixed-income strategy is interest rate anticipation, with secondary focus on return enhancement through quality and sector swaps and credit analysis.

The asset mix Jan. 1 was 88% bonds and 12% cash and stock.

Thomas S. Drumm, senior vice president, is chief investment officer. Client contact is Kent A. Kelley, senior vice president.

• TRAVELERS HILL SAMUEL INTERNATIONAL had $495 million under management, of which $342 million was tax exempt. The firm is an international adviser.

The equity approach is based on quantitative analysis, emphasizing the appraisal of long-term value and short-term risk and reward possibilities, both in U.S. dollar terms. Quantified techniques such as discounted income flow analysis and purchasing power parity



analysis are used.

Travelers Hill is jointly and equally owned by the Travelers Corp. and Hill Samuel Investment Management Ltd.

Clients include Emhart, Stanford University, Equifax and the United Presbyterian Foundation.

David G. Tilles is the chief investment officer. J.C. Parish Jr., executive vice president, is client contact.

Trendstat Capital Management Inc.

10733 Sunset Office Drive, No. 355, St. Louis, Mo. 63127; (314) 822-3500

Total assets managed	$26,000,000
Tax-exempt assets managed	$17,000,000
Minimum separate account	$100,000
Tax-exempt clients	59
Types of accounts managed	CF
No. of portfolio managers	2
Size of research staff	1

Trendstat Capital Management Inc. is an equity manager that also has futures and options capabilities.

The firm uses low p/e, growth stock and market-timing approaches to equities.

In fixed income, it uses models of long-term bonds and interest rates to reduce risk.

The asset mix Jan. 1 was 93% stocks and 7% cash.

Thomas F. Basso, president, is chief investment officer and client contact.

Trevor Stewart Burton & Jacobsen Inc.

90 Park Ave., New York, N.Y. 10016; (212) 972-8150

Total assets managed	$250,000,000
Tax-exempt assets managed	$175,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	30
Types of accounts managed	CEF
No. of portfolio managers	3

Trevor Stewart Burton & Jacobsen Inc. is an asset allocator. It emphasizes equities it expects to do well in a disinflationary economic environment.

The firm's fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 25% stocks, 70% bonds and 5% cash.

Chief investment officer is Paul W.H. Trevor, chairman. Client contact is E. Nicholson Stewart, president.

Trident Investment Management Inc.

80 E. Ridgewood Ave., Fourth Floor, Paramus, N.J. 07653; (201) 265-9600

Total assets managed	$582,000,000
Tax-exempt assets managed	$560,000,000
Real estate assets managed	$124,000,000
Passive assets managed	$22,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	28
Types of accounts managed	CFG
No. of portfolio managers	5
Size of research staff	3

Trident Investment Management Inc. is a balanced manager.

In equities, the firm uses market timing and careful fundamental analysis of each stock after quality and valuation screens are met.

Its fixed-income approach relies on interest rate anticipation, sector analysis and price trends.

The real estate approach emphasizes preservation of capital, present and future cash flows and long-term capital appreciation.

The asset mix Jan. 1 was 31% stocks, 34% bonds, 13% cash, 8% equity real estate, 8% mortgages and 6% mortgage-backed securities.

Trident is a wholly owned subsidiary of Pacific Inland Bancorp.

Chief investment officer is Bohdan J. Kekish, senior vice president. Client contact is Jennifer K. Weiner, vice president.

Trinity Investment Management Corp.

10 Tremont St., Boston, Mass. 02108; (617) 742-9525

Total assets managed	$2,531,000,000
Tax-exempt assets managed	$2,524,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	64
Types of accounts managed	CEFGJ
No. of portfolio managers	9

Trinity Investment Management Corp. is an equity manager.

Portfolio buys and sells are selected primarily by a composite ranking that uses eight sub-models ranging from Graham and Dodd through cash flow plowback to dividend discount. Low p/e and sector rotation are also used.

The asset mix Jan. 1 was 98.1% stocks and 1.9% cash.

In 1985, the firm realized a $1.057 billion gain in new tax-exempt business; 46 clients were added.

Clients include U S WEST, Monsanto, Texaco and USG Corp.

Stanford Calderwood, chairman, is chief executive officer and client contact.

Trusco Capital Management

50 Hurt Plaza, Suite 1400, Atlanta, Ga. 30303; (404) 581-1757

Total assets managed	$2,608,000,000
Tax-exempt assets managed	$2,608,000,000
401(k) and 457 assets managed	$155,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	184
Types of accounts managed	CEFG
No. of portfolio managers	12
Size of research staff	8

Trusco Capital Management Inc. is primarily a balanced manager, but provides equity and fixed-income management.

Its bottom-up equity approach analyzes companies on hidden value, fundamentals, earnings momentum, price trends and insider activity.

Its active fixed-income approach considers returns vs. inflation, money supply, technical factors, economic cycle, value added by yield curve analysis, sector swaps and arbitrage activity.

The asset mix Jan. 1 was 50% stocks, 40% bonds and 10% cash.

Clients include Southern Systems, Coca-Cola, Equifax and Goldkist.

The firm is a wholly owned subsidiary of Trust Company Bank.

Lawrence J. Trotti, president, is chief investment officer. Bob M. Farmer, vice president, is client contact.

Trust Company of the West

400 S. Hope St., Los Angeles, Calif. 90071; (213) 683-4000

Total assets managed	$9,110,000,000
Tax-exempt assets managed	$8,903,000,000
Real estate assets managed	$820,000,000
Passive assets managed	$287,000,000
Minimum separate account	$20,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	14
Size of research staff	10

Trust Company of the West has equity, fixed-income, balanced, real estate, oil and gas, convertible and private placement capabilities.

Its top-down equity approach seeks to identify changes before they are generally perceived and shifts between asset categories and industries to take advantage of change.

The goal of the top-down fixed-income approach is to catch cyclical shifts in interest rates.

In real estate, the firm sponsors a series of closed-end funds using equity purchases and convertible mortgages.

The asset mix Jan. 1 was 56% stocks, 22% bonds, 1% cash and 9% equity real estate. The remaining 12% was divided among oil and gas, private placements and convertibles.

The firm has $287 million in dedicated or immunized bond portfolios.

Ernest O. Ellison, president, is chief investment officer. Thomas E. Larkin, managing director, is client contact.

TSA Capital Management

700 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-7225

Total assets managed	$605,000,000
Tax-exempt assets managed	$605,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	7
Types of accounts managed	CEF
No. of portfolio managers	10
Size of research staff	10

TSA Capital Management is an equity, fixed-income and balanced manager.

Its equity approach uses a systematic quantitative framework based on multiple disciplines. Managers systematically adjust the weightings of a

In fixed income, managers focus on credit and sector analysis, management of quality spreads, issue valuation and liquidity.

The asset mix Jan. 1 was 40% stocks, 35% bonds and 25% cash.

The firm is a newly formed subsidiary of Trust Services of America Inc., which is a subsidiary of CalFed Inc.

Robert D. Arnott, president, is chief investment officer. Richard Boling, executive vice president and director of marketing, is client contact.

Tukman Capital Management

60 E. Sir Francis Drake Blvd. No. 204, Larkspur, Calif. 94939; (415) 461-6833

Total assets managed	$205,000,000
Tax-exempt assets managed	$170,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	18
Types of accounts managed	CEF
No. of portfolio managers	2

Tukman Capital Management, an equity manager, concentrates on highly profitable, cash-generating companies purchased at moderate p/e ratios.

The tax-exempt asset mix Jan. 1 was 85% stocks and 15% cash.

Clients include USAir, Harvey Mudd College, W.R. Grace and Challenger Electrical Equipment.

Melvin T. Tukman, president, and Daniel L. Grossman, vice president, are chief investment officers and client contacts.

Tuttle & Noroian Inc.

353 Sacramento St. No. 1300, San Francisco, Calif. 94111-3625; (415) 956-1128

Total assets managed	$205,000,000
Tax-exempt assets managed	$180,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	150
Types of accounts managed	CEF
No. of portfolio managers	5
Size of research staff	2

Tuttle & Noroian Inc. is an equity manager emphasizing Graham & Dodd and market-timing strategies. In fixed income, it uses interest rate anticipation in active management.

The asset mix Jan. 1 was 95% stocks and 5% cash.

Clients include Leprino Foods, Heidtman Steel and Levitz Electric.

Jason B. Tuttle Sr., chairman, and Steven A. Noroian, president, are chief investment officers. John R. Deller, vice president, is client contact.

U

Unified Management Corp.

600 Guaranty Building, Indianapolis, Ind. 46204; (800) 862-7283

Total assets managed	$300,000,000
Tax-exempt assets managed	$10,000,000
International assets managed	$3,000,000
401(k) and 457 assets managed	$5,000,000
Minimum separate account	$250,000
Tax-exempt clients	100
No. of portfolio managers	2
Size of research staff	1

Unified Management Corp., an equity manager, subjects fundamental and technical data to a series of 17 screens with extra weighting to relative strength, earnings trend and insider transactions.

In fixed income, is searches for high-yield securities with links to equity markets.

The firm uses options.

The asset mix Jan. 1 was 80% stocks, 10% bonds and 10% cash.

Nicholas F. Kaiser, president, is chief investment officer and Ronald L. Keller, vice president, is the client contact.

Union Central Life Insurance

P.O. Box 179, Cincinnati, Ohio 45201; (513) 595-2200

Total assets managed	$1,689,000,000
Tax-exempt assets managed:	
Total	$828,000,000
Pooled accounts	$20,000,000
401(k) and 457 assets managed	$10,000,000
Annuities	$30,000,000
Other	$696,000,000
Types of accounts managed	C
No. of portfolio managers	4
Size of research staff	3

Union Central Life Insurance Co. offers equity, fixed-income, balanced and money market capabilities.

The equity approach uses Graham & Dodd analysis. Interest rate anticipation is used in fixed income.

The asset mix Jan. 1 was 34% stocks, 14% bonds and 52% money market instruments.

Chief investment officer is Michael A. Conway, senior vice president. Client contact is John H. Jacobs, second vice president-group pension sales.

The Union Labor Life Insurance Co.

111 Massachusetts Ave., Washington, D.C. 20001; (202) 682-0900

Total assets managed	$1,379,000,000
Tax-exempt assets managed:	
Total	$1,080,000,000
Pooled accounts	$304,000,000
Separate accounts	$2,000,000
401(k) and 457 assets managed	$750,000
GICs	$251,000,000
Other	$523,000,000
Minimum separate account	$2,000,000
Types of accounts managed	CJ
No. of portfolio managers	2
Size of research staff	7

The Union Labor Life Insurance Co. is an equity and fixed-income manager.

In equities, the emphasis is on a contrarian, value-oriented, total return approach. Risk is controlled to provide investment returns substantially independent of overall market conditions.

Interest rate anticipation is used for 25% of the portfolio assets. The remainder is actively managed by actively swapping between the intermediate and longer maturities as market opportunities arise.

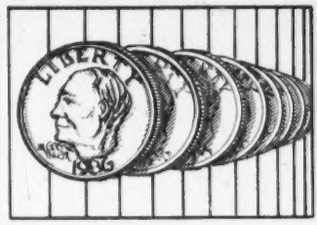
The "J for Jobs" program invests in long-term, first mortgages. About 26% of the mortgage portfolio has some form of participation in rent in addition to the coupon rate of interest.

The asset mix Jan. 1 was 20% stocks, 1% bonds, 9% cash, 57% mortgages and 13% accumulation, guaranteed investment and separate accounts.

Clients include the International Union of Aluminum Workers, International Brotherhood of Firemen & Oilers, Food and Commercial Workers International and United Glass and Ceramic Workers of North America.

The firm is affiliated with ULICO Casualty Co.

Chief investment officer is Herbert C. Canapary, vice president-investments.



Client contact is Robert Cassin, director of group pensions.

Union Mutual Life Insurance

2211 Congress St., Portland, Maine 04122; (207) 780-6399

Total assets managed	$5,230,000,000
Tax-exempt assets managed:	
Total	$3,209,000,000
Separate accounts	$33,000,000
Real estate assets managed	$15,000,000
International assets managed	$8,000,000
GICs	$1,071,000,000
Annuities	$65,000,000
Other	$2,040,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	20

Union Mutual Life Insurance Co. emphasizes market timing within an emerging growth/growth stock strategy in its equity approach.

In fixed income, managers are oriented toward private placements and commercial mortgages, with emphasis on sector analysis.

The asset mix for separate accounts Jan. 1 was 88% stocks and 12% cash.

David M. Tourangeau, senior vice president-investments, is chief investment officer.

Union National Trust

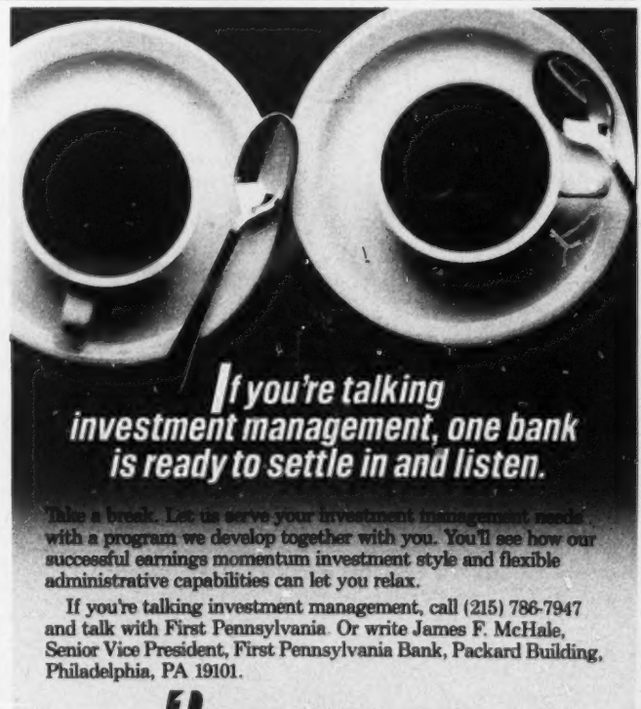
P.O. Box 1541, Little Rock, Ark. 72116; (501) 378-4000

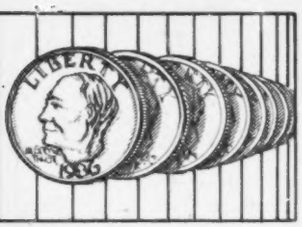
Total assets managed	$400,000,000
Tax-exempt assets managed:	
Total	$60,000,000
Commingled accounts	$3,000,000
Separate accounts	$57,000,000
International assets managed	$3,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$500,000
Tax-exempt clients:	
Commingled	10
Separate	250
Types of accounts managed	CEFGJ
No. of portfolio managers	1
Size of research staff	1

Union National Trust offers equity, fixed-income and balanced capabilities.

In equities, managers use a variety of screens that focus on relative p/es of 0.8 or less and emphasize strong earnings growth.

In fixed income, managers primarily





use a 10-year ladder approach, switching among sectors when appropriate.

The Jan. 1 asset mix was 40% stocks, 50% bonds and 10% cash.

Thomas B. Welch, trust investment officer, is chief investment officer. Client contact is Ernie Farquharson, employee benefit administrative officer.

Union Planters National Bank

P.O. Box 387, Trust Department, Memphis, Tenn. 38147; (901) 685-2068

Total assets managed	$480,000,000
Tax-exempt assets managed	$330,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$25,000
Types of accounts managed	CEFJ
No. of portfolio managers	4

Union Planters National Bank is an equity, fixed-income and balanced manager with options capabilities.

The equity approach emphasizes sector rotation; the fixed-income approach uses sector analysis.

The Jan. 1 tax-exempt asset mix was 40% stocks, 50% bonds and 10% miscellaneous.

Abbe Kaplan, vice president-investment department, is chief investment officer. Ed Walton, business development officer, is client contact.

United Capital Management

United Bank Center, 1700 Broadway, Suite 1300, Denver, Colo. 80274; (303) 831-9474

Total assets managed	$3,088,000,000
Tax-exempt assets managed	$2,928,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	34
Types of accounts managed	CFGJ
No. of portfolio managers	4
Size of research staff	2

United Capital Management is an equity and balanced manager.

In equities, managers buy depressed, out-of-favor stocks with major rebound potential over a three-year horizon. A strict sell discipline is maintained.

Its fixed-income approach uses business cycle analysis to evaluate the direction of interest rates. Sector, quality and maturity characteristics are determined by spread analysis.

The Jan. 1 mix for tax-exempt assets was 88% stocks, 8% bonds and 4% cash.

Managers follow 80 stocks closely and 130, generally. All research is generated internally.

Clients include U S WEST, Washington state, General Public Utilities and Greyhound.

The firm is owned by United Bank of Denver.

W. Lon Schreur, president, is chief investment officer. Denise Bryant, vice president, is client contact.

United Missouri Investment Counsel Service

Box 226, Kansas City, Mo. 64141; (816) 556-7340

Total assets managed	$2,832,000,000
Tax-exempt assets managed	$1,931,000,000
Minimum separate account	$500,000
Tax-exempt clients	450
Types of accounts managed	CEFGJ
No. of portfolio managers	11
Size of research staff	5

United Missouri Investment Counsel Service is an equity, fixed-income and balanced manager.

Its equity investments are in undervalued companies with strong balance sheet characteristics whose outlooks call for above-average unit growth with a product line that offers pricing flexibility.

Its primary fixed-income emphasis is placed on maturity shifts based on interest rate outlook. High-quality ratings generally are not sacrificed despite spreads. Key forecasting tools are related to manufacturing operating rates.

The Jan. 1 tax-exempt asset mix was 50% stocks, 40% bonds and 10% cash.

The firm follows 150 stocks closely and 200, generally.

Clients include V.F. Corp., Shriners Hospital, Missouri Local Government Employees and William Jewell College.

The firm is affiliated with United Missouri Bank of Kansas City.

Stuart L. Murdock, executive vice president and senior investment officer, is chief investment officer. David B. Anderson, senior vice president and investment officer, is client contact.

United of Omaha Life Insurance Co.

Mutual of Omaha Plaza, Omaha, Neb. 68135; (402) 342-7600

Total assets managed	$2,750,000,000
Tax-exempt assets managed:	
Total	$989,000,000
Pooled accounts	$8,000,000
Real estate assets managed	$353,000,000
401(k) and 457 assets managed	$21,000,000
GICs	$228,000,000
Annuities	$35,000,000
Other	$719,000,000
Minimum separate account	$10,000
Types of accounts managed	CG
No. of portfolio managers	3
Size of research staff	9

United of Omaha Life Insurance Co. is an equity and fixed-income manager.

In equities, emphasis is placed on established companies with strong earnings growth records.

In fixed income, managers control the interest rate risk through duration matching and the credit risk through extensive credit analysis.

In real estate, the insurer participates primarily in the lending aspect. Mortgages are generally in the five- to 10-year range.

The asset mix Jan. 1 was 62% stocks and 38% cash.

Clients include Nebraska, Midwest Operating Engineers, IBEW Local 55 and Kendavis Industries.

The company is affiliated with Kirkpatrick, Pettis, Smith & Polian.

Thomas M. Crummer, senior executive vice president, is chief investment officer. Client contact is Walter C. Mailand, second vice president-group pension sales.

United Security Trust Co.

1123 Chapalla, Santa Barbara, Calif. 93121; (805) 963-9751

Total assets managed	$300,000,000
Tax-exempt assets managed:	
Total	$300,000,000
Real estate assets managed	$28,000,000
Minimum separate account	$50,000
Types of accounts managed	CEFG

United Security Trust Co. is an equity, fixed-income, balanced and mortgage-backed securities manager. The equity approach is based on Graham & Dodd and emerging growth. The fixed-income approach relies on sector analysis.

The mix of tax-exempt assets Jan. 1 was 20% stocks, 10% bonds and 70% mortgage-backed securities.

Clients include Collins Food, Geodynamics, Raymond International and Costa Mesa, Calif.

Chief investment officer is Thomas J. Lightroet. Client contact is Hugh C. Ogilvie.

United States Trust Co., Boston

40 Court St., Boston, Mass. 02108; (617) 726-7250

Total assets managed	$510,000,000
Tax-exempt assets managed:	
Total	$305,000,000
Commingled accounts	$40,000,000
Separate accounts	$265,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	90
Separate	70
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	2

United States Trust Co., Boston, offers equity, fixed-income and balanced management.

Managers use a fundamental, valuation equity approach combined with MPT-based asset allocation to determine the level of commitment to equities and weightings for market sectors. For individual stocks, managers look for above-average companies selling at average valuations.

Interest rate forecasts and sector analysis are used in fixed income.

The asset mix Jan. 1 was 70% stocks and 30% cash.

Domenic Colasacco, senior vice president, is chief investment officer. Client contact is Robert A. Lincoln; vice president.

United States Trust Co. of New York

45 Wall St., New York, N.Y. 10005; (212) 806-3807

Total assets managed	$11,100,000,000
Tax-exempt assets managed	$1,800,000,000
Real estate assets managed	$78,000,000
International assets managed	$16,000,000
Passive assets managed	$600,000,000
Tax-exempt clients	181
Types of accounts managed	CEFGJ
No. of portfolio managers	45
Size of research staff	10

United States Trust Co. of New York is an equity, fixed-income, balanced, real estate and international manager.

Its equity approach is based on a Graham & Dodd strategy. In fixed income, managers attempt to shift maturity and sector weightings to capture a positive return under all market conditions. Analysis of the yield curve plays a vital role in selection.

In real estate, managers purchase predevelopment land for cash and hold for appreciation. The average holding period is five years.

The Jan. 1 tax-exempt asset mix was 50% stocks, 25% bonds, 5% cash, 5% equity real estate and 15% other.

Clients include NYNEX, Mobil, Ciba-Geigy and New York State Employees.

Jay C. Harbeck and Frederick B. Taylor, senior vice presidents, are chief investment officers. John R. Gepfert, vice president, is client contact.

United Trust Fund

4770 Biscayne Blvd., Miami, Fla. 33137; (305) 576-7711

Total assets managed	$143,000,000
Total tax-exempt assets managed	$0
Minimum separate account	$5,000,000
No. of portfolio managers	5

United Trust Fund is a fixed-income and real estate manager.

Both equity and fixed-income approaches are passive. In real estate, the bank uses long-term net leases with major corporations emphasizing a passive approach.

James Nolan, senior vice president, is chief investment officer. Fred Berliner, director of investments, is client contact.

Unity Management Inc.

2001 Marcus Ave., Lake Success, N.Y. 11042; (516) 437-2200

Total assets managed	$390,000,000
Tax-exempt assets managed	$390,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	52
Types of accounts managed	CGJ
No. of portfolio managers	5
Size of research staff	4

Unity Management Inc. is primarily a balanced manager. The equity approach is based on low p/e, value-oriented equities selected through in-house computer analysis and traditional research sources.

The fixed-income policy is established by a review of conventional and computer-generated interest rate forecasts to determine maturity allocation.

It established Unity Realty Trust Co. to create construction projects by investing in commercial real estate development through equity or mortgage obligations.

The Jan. 1 tax-exempt asset mix was 30% stocks, 65% bonds and 5% cash.

Clients include Sheet Metal Workers, New York City Transit Police and Iron Workers Local 580.

Unity Mortgage & Realty Trust Corp. is a subsidiary of the firm.

Irving Decter, president, is chief investment officer. He and Kenneth Decter, vice president, are client contacts.

V

Valley National Bank of Arizona

P.O. Box 71, Phoenix, Ariz. 85001; (602) 261-1680

Total assets managed	$1,965,000,000
Tax-exempt assets managed	$518,000,000
Real estate assets managed	$225,000,000
401(k) and 457 assets managed	$42,000,000
Tax-exempt clients:	
Commingled	11
Separate	289
Types of accounts managed	CGJ
No. of portfolio managers	14
Size of research staff	4

an equity, fixed-income, balanced and real estate manager.

The equity approach is centered toward quality growth companies that are strongly positioned to benefit from long-term trends. Systematic relative valuation methodologies are used.

For fixed income, interest rate anticipation is the primary determinant, but sector analysis is used to add incremental return.

Real estate investments are concentrated in Arizona-based commercial mortgages with interest rate and call provisions, in an open-end equity real estate fund.

The Jan. 1 tax-exempt asset mix was 18% stocks, 33% bonds, 5% cash, 1% equity real estate and 43% mortgages.

Lyle Wurtz, vice president and manager-trust investments, is chief investment officer. Paul Knowles, vice president and manager-trust employee benefits, is client contact.

Value Investors Inc.

601 Locust, Des Moines, Iowa 50309; (515) 247-6582

Total assets managed	$2,207,000,000
Tax-exempt assets managed	$1,404,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	6
Types of accounts managed	CFG
No. of portfolio managers	2
Size of research staff	4

Value Investors Inc. is an equity and balanced manager.

In equities, it uses sector rotation and Graham & Dodd analysis. It concentrates portfolios in its "ideas," emphasizing those with long horizons. Portfolios have a low turnover rate.

The asset mix Jan. 1 was 98.6% stocks and 1.4% cash.

Clients include Olympic Foundation, Iowa Public Employees, Nebraska and St. Louis County.

The firm is a wholly owned subsidiary of the Principal Financial Group.

Ralph Kosmicke, president, is chief investment officer. Ann Frenzen, vice president, is client contact.

Value Line Asset Management

711 Third Ave., New York, N.Y. 10017; (212) 687-3965

Total assets managed	$1,269,000,000
Tax-exempt assets managed	$1,263,000,000
Minimum separate account	$3,000,000
Tax-exempt clients	30
Types of accounts managed	CEFG
No. of portfolio managers	7
Size of research staff	2

Value Line Asset Management is an equity manager.

Stock selection is based on a ranking system that uses actual earnings and price data. Sector rotation is used.

The Jan. 1 tax-exempt asset mix was 76% stocks, 3% bonds and 21% cash.

Managers follow 1,700 stocks closely and 300, generally; 90% of research is generated internally.

Clients include Eastman Kodak, GM, Singer and United Technologies.

The firm is a subsidiary of Value Line Inc.

Mark K. Tavel, president, is chief investment officer. T. Radey Johnson, vice president, is client contact.

ValueQuest Ltd.

Roundy's Hill, Marblehead, Mass. 01945; (617) 631-5508

Total assets managed	$161,000,000
Tax-exempt assets managed	$157,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	8
Types of accounts managed	CEG
No. of portfolio managers	3
Size of research staff	1

ValueQuest Ltd. is an equity manager emphasizing low p/e and Graham & Dodd strategies.

The Jan. 1 tax-exempt asset mix was 98.3% stocks and 1.7% cash.

Managers follow 75 stocks closely and 200, generally; 80% of research is generated internally.

Clients include 3M, Boeing, Washington University and New York City Teachers.

Katherine Busboom Magrath, partner, is chief investment officer and cli-

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First Pennsylvania Bank
Trust and Investment Services Group

Van Deventer & Hoch

420 N. Brand, Fourth Floor, Glendale, Calif. 91203; (213) 245-7461

Total assets managed	$868,000,000
Tax-exempt assets managed	$325,000,000
Minimum separate account	$100,000
Tax-exempt clients	475
Types of accounts managed	CEFG
No. of portfolio managers	15
Size of research staff	5

Van Deventer & Hoch is a balanced manager.

In equities, managers use issues of financially sound companies only when priced substantially below their current/real net worth. Convertibles are used.

Fixed-income policies stress liquidity and absolute safety of capital. Maturities are evenly staggered to a maximum of seven years depending on interest rate forecasts.

The Jan. 1 tax-exempt asset mix was 45% stocks, 40% cash and 15% convertibles.

Managers follow 200 stocks closely; 90% of research is generated internally.

The firm is a wholly owned subsidiary of Chemical New York Corp.

Robert E. Van Deventer, chairman of the board, is chief investment officer. Richard A. Snyders, executive vice president, is client contact.

Van Eck Investments

122 E. 42nd St., New York, N.Y. 10168; (212) 687-5200

Total assets managed	$790,000,000
Tax-exempt assets managed	$40,000,000
International assets managed	$40,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	1
No. of portfolio managers	6

Van Eck Investments is an international manager that seeks to identify long-term trends and themes for international investing.

The Jan. 1 tax-exempt asset mix was 90% stocks, 5% bonds and 5% cash.

Managers follow 200 stocks closely and 350, generally.

The firm is a subsidiary of Van Eck Financial Services.

Klaus Buescher is chief investment officer. William D. Jones, senior vice president, is client contact.

The Vanguard Group of Investment Cos. Inc.

Vanguard Financial Center, Valley Forge, Pa. 19482; (215) 648-6000

Total assets managed	$6,150,000,000
Tax-exempt assets managed	$3,892,000,000
401(k) and 457 assets managed	$748,000,000
Passive assets managed	$442,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	2,006
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	5

The Vanguard Group of Investment Cos. Inc. is a family of mutual funds.

The firm will vary its equity and fixed-income approaches depending upon a fund's investment objective and the investment philosophy of the portfolio managers.

The asset mix Jan. 1 was 10% stocks, 60% bonds and 30% cash.

Clients include Air Products and Chemicals, Harvard University, Rockwell and Schering Plough.

Vanguard hires other firms to manage money as well. Total assets managed by Vanguard and the firms it hires is $16.51 billion, of which $6.023 billion are tax exempt.

John C. Bogle, chairman, is chief investment officer. Ron L. Cannon, vice president-institutional marketing, is client contact.

Vaughan, Nelson, Scarborough & McConnell

6300 Texas Commerce Tower, Houston, Texas 77002-3071; (713) 224-2545

Total assets managed	$1,750,000,000
Tax-exempt assets managed	$1,620,000,000
Minimum separate account	$2,500,000
Tax-exempt clients	52
Types of accounts managed	CEFGJ
No. of portfolio managers	6

Vaughan, Nelson, Scarborough & balanced manager.

In equities, managers emphasize a "middle 60%" approach to downside protection and stable growth using individual issue selection through original primary research, active asset allocation and proprietary relative valuation analysis.

The fixed-income approach uses interest rate anticipation and sector analysis.

The Jan. 1 tax-exempt asset mix was 70% stocks and 30% bonds.

Managers follow 50 stocks closely and 200, generally; 75% of research is generated internally.

Clients include Browning Ferris Industries, Daniel Industries, Texas A&M Foundation and Trinity University.

Eugene H. Vaughan Jr., president, is chief investment officer. John E. Young, principal, is client contact.

The Venture Capital Fund of New England

100 Franklin St., Boston, Mass. 02110; (617) 451-2575

Total assets managed	$58,000,000
Tax-exempt assets managed	$27,000,000
Minimum separate account	$500,000
Tax-exempt clients	17
Types of accounts managed	CEFGJ
No. of portfolio managers	3

The Venture Capital Fund of New England is a venture capital manager.

The mix of tax-exempt assets Jan. 1 was 37% stocks and 63% cash.

Clients include MIT endowment, Sears, Wisconsin and Rensselaer Polytechnic Institute.

Chief investment officer is Richard A. Farrell, general partner.

Verus Capital

45 Broadway, New York, N.Y. 10006; (212) 943-9200

Total assets managed	$278,000,000
Tax-exempt assets managed	$278,000,000
International assets managed	$32,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	7
Types of accounts managed	C
No. of portfolio managers	3

Verus Capital, an equity manager, seeks equities with unique fundamentals and attractive risk/reward valuations. It owns and actively manages no more than 30 special equity positions.

The asset mix Jan. 1 was 85% stocks and 15% cash.

Verus Capital is a division of Arnhold and S. Bleichroeder Inc.

Clients include Allied-Signal, ITT, Pfizer and Frank Russell Trust.

Charles C. Reilly, president, is chief investment officer. Frederic C. Reynolds, vice president, is client contact.

Virginia Investment Counselors Inc.

1300 United Virginia Bank Building, Norfolk, Va. 23510; (804) 623-2491

Total assets managed	$305,000,000
Tax-exempt assets managed	$150,000,000
Real estate assets managed	$4,000,000
401(k) and 457 assets managed	$3,000,000
Minimum separate account	$200,000
Tax-exempt clients	62
Types of accounts managed	CEF
No. of portfolio managers	3
Size of research staff	1

Virginia Investment Counselors Inc. is a balanced manager. Its equity approach uses B+ rated, dividend-paying stocks that tend to be undervalued.

In fixed income, it combines interest rate anticipation and sector analysis with an emphasis on intermediate maturities. Options are used.

The Jan. 1 tax-exempt asset mix was 32% stocks, 47% bonds, 18% cash, 1% mortgage-backed securities and 2% mortgages.

Frederick V. Martin, president, is chief investment officer. Henry U. Harris III, vice president, is client contact.

W

Wachovia Bank & Trust Co.

P.O. Box 3099, Winston-Salem, N.C. 27150; (919) 770-4169

Total assets managed	$5,132,000,000
Tax-exempt assets managed	$2,971,000,000

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WORK WITH THE BEST IN THE BUSINESS

Ætna

Ætna Life Insurance Company

Real estate assets managed $1,724,000,000
Minimum separate account $1,000,000
Types of accounts managed ..... CEFGJ
No. of portfolio managers 22
Size of research staff 6

Wachovia Bank & Trust Co. is an equity, fixed-income, balanced and real estate manager.

In equities, the bank uses sector rotation to capitalize on societal and economic changes. The fixed-income approach uses interest rate anticipation and sector analysis.

In real estate, a dual approach combines acquisition and development to take advantage of any market condition.

The Jan. 1 tax-exempt asset mix was 55% stocks, 35% bonds and 10% equity real estate.

Managers follow up to 250 stocks closely and up to 150, generally; 20% of research is generated internally.

Clients include R.J. Reynolds, AMP, Eli Lilly and Armstrong World Industries.

H. Vernon Winters, group vice president and manager-trust investment management group, is chief investment officer. Nick Verano, vice president and manager of marketing, and Cindy Corey, marketing consultant, are client contacts.

Waddell & Reed Asset Management Co.

2400 Pershing Road, Kansas City, Mo. 64108; (816) 283-4150

Total assets managed $1,288,000,000
Tax-exempt assets managed $859,000,000
Minimum separate account $3,000,000
Tax-exempt clients 37
Types of accounts managed ..... CEFG
No. of portfolio managers 8
Size of research staff 26

Waddell & Reed Asset Management Co. is an equity, fixed-income and balanced manager.

The degree of participation in the equity market is based on discipline and an extensive analysis of price vs. intrinsic value relationships and the business cycle. Options and fixed-income futures are used.

In fixed income, interest rate anticipation is used to alter durations within a range of one to 6½ years.

The Jan. 1 tax-exempt asset mix was 71% stocks, 19% bonds and 10% cash.

Clients include Akzona, Eastman Kodak, Houston police and Minnesota.

The firm is a wholly owned subsidiary of Waddell & Reed Investment Management Co., which is owned by Torchmark Inc.

Fred G. Mitchell is chief investment officer. Robert T. Hunter, vice president, is client contact.

Maury Wade & Co.

5100 Poplar Ave., Suite 2224, Memphis, Tenn. 38137; (901) 682-4613

Total assets managed $36,000,000
Tax-exempt assets managed $11,000,000
Minimum separate account $100,000
Types of accounts managed ..... CEF
No. of portfolio managers 1

Maury Wade & Co., a balanced manager, bases its equity approach on Graham & Dodd and its fixed-income approach on interest rate anticipation.

Half of the research is generated internally, with 50 stocks followed closely and 200, generally.

Maury Wade Jr. is chief investment officer and client contact.

Wagner & Hamil Inc.

730 17th St., No. 710, Denver, Colo. 80202; (303) 892-6928

Total assets managed $12,000,000
Tax-exempt assets managed $1,000,000
401(k) and 457 assets managed $1,000,000
Minimum separate account $100,000
Tax-exempt clients 1
Types of accounts managed C
No. of portfolio managers 2
Size of research staff 1

Wagner & Hamil Inc., an equity manager, seeks undervalued long-term growth through fundamental analysis. Minimum turnover, ROE and strong balance sheets are stressed.

The fixed-income approach is passive, focusing on interest rate anticipation.

The tax-exempt asset mix Jan. 1 was 60% stocks and 40% bonds.

Judith B. Wagner is the chief investment officer and client contact.

Wagner Southern Forest Investments Inc.

11 Piedmont Center, Suite 404, Atlanta, Ga. 30305; (404) 239-0986

Minimum separate account $20,000,000
No. of portfolio managers 2
Size of research staff 1

Wagner Southern Forest Investments Inc., established in February 1984, acquires and manages timberland to produce income and capital growth.

Wagner Woodlands Inc., the parent company, has $50 million in assets.

Charles M. Tarver, principal, is chief investment officer. David S. Graham, principal, is client contact.

Wagstaff, Lodefink & Associates

136 E. South Temple, No. 1740, Salt Lake City, Utah 84111; (801) 532-2777

Total assets managed $7,000,000
Tax-exempt assets managed $6,000,000
Minimum separate account $250,000
Tax-exempt clients 15
Types of accounts managed ..... CEFG
No. of portfolio managers 2

Wagstaff, Lodefink & Associates, an equity and balanced manager, bases its equity approach on growth stocks and low p/e. The firm's fixed-income approach uses interest rate anticipation.

The mix of tax-exempt assets Jan. 1 was 85% stocks and 15% cash.

Eighty percent of research is generated internally, with 50 stocks followed closely and 100, generally.

Chief investment officer is David L. Lodefink, partner. Client contact is David J. Wagstaff, partner.

Wakley & Roberton Inc.

W. 601 First Ave., Suite 500, Spokane, Wash. 99204; (509) 838-3538

Total assets managed $86,000,000
Tax-exempt assets managed $66,000,000
Minimum separate account $250,000
Tax-exempt clients 35
Types of accounts managed ..... CEFGJ
No. of portfolio managers 2

Wakley & Roberton Inc. is a balanced manager. In equities, it takes a top-down fundamentalist view using sector rotation with some market-timing inputs.

In fixed income, it relies on interest rate anticipation.

The mix of tax-exempt assets Jan. 1 was 46% stocks, 44% bonds and 10% cash.

Ten percent of research is generated internally.

Chief investment officer is Neil F. Wakley, president. Client contact is Paul W. Mann, vice president.

Robert M. Walker & Associates Inc.

12700 Shelbyville Road, Louisville, Ky. 40243; (502) 245-4488

Total assets managed $10,000,000
Tax-exempt assets managed $6,000,000
401(k) and 457 assets managed $1,000,000
Minimum separate account $250,000
Tax-exempt clients 11
Types of accounts managed ..... CJ
Size of research staff 2

Robert M. Walker & Associates Inc., an equity manager, focuses on value within growth and emerging growth sectors. It generally seeks under-researched, smaller-capitalization companies.

Fixed income is used only to meet client risk tolerance level or when anticipated return exceeds alternative investments.

The asset mix Jan. 1 was 65% stocks, 16% bonds, 14% cash and 5% mortgage-backed securities.

Robert M. Walker is chief investment officer. Byron J. Grimes is the client contact.

Wall, Patterson, Hamilton & Allen Inc.

229 Peachtree St. N.E., Suite 900, Atlanta, Ga. 30043; (404) 659-6060

Total assets managed $950,000,000
Tax-exempt assets managed $879,000,000
Minimum separate account $5,000,000
Tax-exempt clients 86
Types of accounts managed ..... CEFGJ
No. of portfolio managers 6
Size of research staff 2

Wall, Patterson, Hamilton & Allen Inc. is a balanced manager.

The firm's equity approach is based on selective, superior growth companies from a prescreened universe based on earnings and valuation criteria. Its fixed-income approach is based upon yield curve analysis with portfolios structured accordingly solely with government/agency securities.

The mix of tax-exempt assets Jan. 1 was 59% stocks, 33% bonds and 8% cash.

Seventy-five percent of research is generated internally with 200 stocks followed closely.

Chief investment officer is J.O. Patterson, chairman. William M. Robertson, vice president, is client contact.

Warburg Investment Management International

33 King William St., London, England EC4R 9AS; (01) 280-2800

Total assets managed $374,000,000
Tax-exempt assets managed $280,000,000
International assets managed $280,000,000
Minimum separate account $5,000,000
Tax-exempt clients 14
Types of accounts managed ..... CEFG
No. of portfolio managers 5
Size of research staff 25

Warburg Investment Management International Ltd. is an equity and international manager.

Its equity approach combines top-down and bottom-up analyses with heavy concentration on research. There is active management at both asset allocation and stock selection levels. Options can be used. Managers rely on sector rotation, Graham & Dodd, MPT and market timing.

All tax-exempt assets were invested in stocks Jan. 1.

Half of the research is generated internally, with 200 stocks followed closely and 600, generally.

Clients incluoe Arco, Dartmouth College, Hercules and Sun Co.

The firm is a wholly owned subsidiary of Mercury Asset Management Ltd., which is 100% owned by Mercury International Group PLC, which also owns the merchant bank, S.G. Warburg & Co. Ltd. Assets of the parent and subsidiaries total $17 billion, of which $13 billion are tax exempt.

Robert P.B. Michaelson, deputy chairman, is chief investment officer. Client contact is John G. Townsend, director, at (212) 415-1925.

Warburg, Pincus Counsellors Inc.

466 Lexington Ave., New York, N.Y. 10017; (212) 878-9218

Total assets managed $2,720,000,000
Tax-exempt assets managed $1,244,000,000
Minimum separate account $10,000,000
Tax-exempt clients 67
Types of accounts managed ..... CEF
No. of portfolio managers 8
Size of research staff 5

Warburg, Pincus Counsellors Inc. is an equity manager.

Stock selection is based on in-house research. A consistent fundamental and stock evaluation approach focuses on financially strong, moderate-sized companies having superior earnings prospects.

The fixed-income approach implements interest rate anticipation strategies, focusing primarily on intermediate maturities.

The mix of tax-exempt assets Jan. 1 was 73% stocks, 20% bonds and 7% cash.

Clients include United Mine Workers, Guggenheim Memorial Foundation, Rockefeller Foundation and Mount Sinai Hospital.

All research is generated internally, with 175 stocks followed closely and 300, generally.

Chief investment officer is John L. Furth, president. Client contact is Richard H. Klemm, senior vice president.

Ward & Wissner Capital Management Inc.

380 Madison Ave., New York, N.Y. 10017; (212) 557-2072

Total assets managed $342,000,000
Tax-exempt assets managed $342,000,000
Passive assets managed $342,000,000
Minimum separate account $25,000,000
Tax-exempt clients 8
Types of accounts managed ..... CF
No. of portfolio managers 3
Size of research staff 2

Ward & Wissner Capital Management Inc. is a fixed-income manager with a passive approach. All bond strategies promise either a specific nominal, minimum or real rate or are designed to hedge cash securities. It uses options on financial futures and fixed-income futures.

The tax-exempt asset mix Jan. 1 was 85% bonds (including mortgage-backed securities), 5% cash and 10% options and futures.

Clients include Gates Rubber, Stone & Webster, Robertshaw Controls and Centel.

Leonard H. Wissner, chairman, and James S. Ward, president, are the chief investment officers. Mr. Ward is the client contact.

Wardley Marine International Investment Management

250 Park Ave., New York, N.Y. 11364; (212) 503-2741

Total assets managed $95,000,000
Tax-exempt assets manag.d $76,000,000
International assets managed $76,000,000
Minimum separate account $5,000,000
Tax-exempt clients 5
Types of accounts managed ..... CF
No. of portfolio managers 5
Size of research staff 10

Wardley Marine International Investment Management is an international manager.

Managers are top-down fundamentalists. Stock market weights are based on projected accelerating economic growth in the country, and stock selection is based on relative accelerating earnings growth potential. Interest rate anticipation is used for fixed income.

The Jan. 1 asset mix was 89.5% stocks, 9.9% bonds and 0.6% cash.

Ian R. Henderson, managing director, is chief investment officer. Client contact is Deborah G. George, executive director.

David E. Ware & Associates

1815 Hicks Road, Suite C, Rolling Meadows, Ill. 60008; (312) 991-4440

Total assets managed $12,000,000
Tax-exempt assets managed $7,000,000
Minimum separate account $120,000
Tax-exempt clients 19
Types of accounts managed ..... CE
No. of portfolio managers 1

David E. Ware & Associates Inc. is a balanced manager.

In equities, it purchases low p/e, low price-to-book value securities of profitable companies with total projected returns in excess of 3% above prevailing long-term bond yields.

The firm has a passive approach to fixed income, purchasing government securities as an alternative to equities when there are not enough common stocks meeting portfolio criteria.

The mix of tax-exempt assets Jan. 1 was 30% stocks, 45% bonds and 25% cash.

David E. Ware, president, is chief investment officer and client contact.

Wasatch Advisors Inc.

68 S. Main, Salt Lake City, Utah 84101; (801) 533-0777

Total assets managed $121,000,000
Tax-exempt assets managed $107,000,000
401(k) and 457 assets managed $5,000,000
Minimum separate account $300,000
Tax-exempt clients 99
Types of accounts managed ..... CG
No. of portfolio managers 3
Size of research staff 3

Wasatch Advisors Inc., an equity manager, uses a bottom-up asset allocation and is value oriented as defined by earnings growth vs. p/e. For fixed income, an in-house yield curve market model is used.

The mix of tax-exempt assets Jan. 1 was 70% stocks, 10% bonds and 20% cash.

Forty stocks are followed closely and 100, generally; 90% of research is generated internally.

Samuel S. Stewart Jr., president, is chief investment officer. Client contact is Mark E. Bailey.

Waycross Investment Management Co. Inc.

1300 Market St., P.O. Box 1045, Wilmington, Del. 19899; (302) 656-2009

Total assets managed $21,000,000
Tax-exempt assets managed $15,000,000
Minimum separate account $250,000
Tax-exempt clients 19
Types of accounts managed ..... CF
No. of portfolio managers 2
Size of research staff 1

Waycross Investment Management Co. Inc. is an equity and balanced manager.

It uses a structured screening process for medium and smaller-cap equities based on proprietary momentum-relative p/e model and a value screen.

The fixed-income portion of balanced accounts is invested in high-quality bonds with maturities of five years or less.

The mix of tax-exempt assets as of Jan. 1 was 44% stocks, 40% bonds and 16% cash.

Chief investment officer is William M. Ryan, president. Michael F. Ryan, vice president, is client contact.

Webster Management Corp.

20 Exchange Place, New York, N.Y. 10005; (212) 510-5352

Total assets managed $3,685,000,000
Tax-exempt assets managed $298,000,000
Minimum separate account $10,000,000
Tax-exempt clients 31
Types of accounts managed ..... CEFGJ
No. of portfolio managers 19

Webster Management Corp. is an equity, options and futures manager.

The firm manages equity portfolios to preserve capital in declining markets and maximize returns in rising markets.

Forecasting the trend of interest rates is the key determinant of the firm's fixed-income strategy. It also uses arbitrage strategies with options and futures.

The mix of tax-exempt assets as of Jan. 1 was 65% stocks and 35% bonds.

Seventy-five percent of research is generated internally, with 100 stocks followed closely and 500, generally.

Kidder, Peabody & Co. is the sole owner of Webster Management Corp.

Clients include North American Coal, Varo and Roberts College.

James D. Taliaferro, president is chief investment officer. Client contact is William O. Melvin Jr., director of investments.

Wedge Capital Management

1650 Charlotte Plaza, Charlotte, N.C. 28244; (704) 334-6475

Total assets managed $152,000,000
Tax-exempt assets managed $125,000,000
401(k) and 457 assets managed $12,000,000
Minimum separate account $3,000,000
Tax-exempt clients 28
Types of accounts managed ..... CEFG
No. of portfolio managers 3
Size of research staff 1

Wedge Capital Management Inc. is an equity, fixed-income and balanced manager.

In equities, the firm uses quantitative disciplines to assist in capital market analysis and to identify stocks of good value at relatively low price. Interest rate anticipation is used in its fixed-income approach. Options are used.

The asset mix Jan. 1 was 68% stocks, 7% bonds and 25% cash.

Clients include DeKalb County, Ga.

and Trailways.

Chief investment officer is Richard X. Hodde, executive vice president. William E. Keenan, president, is client contact.

Weiser Investment Management Ltd.

135 S. LaSalle St., Suite 630, Chicago, Ill. 60603; (312) 372-1535

Total assets managed	$23,000,000
Tax-exempt assets managed	$7,000,000
Minimum separate account	$300,000
Tax-exempt clients	11
Types of accounts managed	C
No. of portfolio managers	2

Weiser Investment Management Ltd. is a balanced manager.

In equities, it uses a flexible Graham & Dodd approach that searches for value yet allows for variances in such criteria as yield or p/e ratios.

The use of fixed-income is limited. The firm normally stays short-term on straight fixed-income securities but may go longer-term through convertible debentures.

The asset mix Jan. 1 was 70% stocks, 18% bonds and 12% cash.

Morris Weiser is chief investment officer. Mr. Weiser and Michael Herst are client contacts.

Weiss, Peck & Greer

1 New York Plaza, 30th Floor, New York, N.Y. 10004; (212) 908-9500

Total assets managed	$3,137,000,000
Tax-exempt assets managed	$2,600,000,000
Minimum separate account	$20,000,000
Tax-exempt clients	94
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	6

Weiss, Peck & Greer is an active equity manager with the principal focus on sector rotation and growth-oriented security selection.

The firm will consider alternative investments to equities — such as bonds and cash — in adverse markets or when appropriate.

Options are used.

The asset mix Jan. 1 was 80% stocks, 14% bonds and 6% cash.

Stephen H. Weiss, managing partner, is chief investment officer. Client contact is Vincent E. Teti, director of marketing and client services.

Wellington/Thorndike, Doran

28 State St., Boston, Mass. 02109; (617) 227-9500

Total assets managed	$22,584,000,000
Tax-exempt assets managed	$8,257,000,000
Real estate assets managed	$375,000,000
International assets managed	$91,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	186
Types of accounts managed	CEFGJ
No. of portfolio managers	27
Size of research staff	38

Wellington/Thorndike, Doran is an equity, fixed-income, balanced, real estate and international manager.

The firm offers a broad range of equity and fixed-income styles.

The asset mix Jan. 1 was 69% stocks, 17% bonds, 9% cash and 5% mortgage-backed securities.

Wellington/Thorndike, Doran is a wholly owned subsidiary of Wellington Management Co./Thorndike Doran Paine & Lewis.

Robert W. Doran, president, is chief investment officer. Client contact is Dena G. Willmore, senior vice president and director of marketing.

Wells Fargo Investment Advisors

50 California St., San Francisco, Calif. 94163; (415) 434-6025

Total assets managed	$29,520,000,000
Tax-exempt assets managed	$29,520,000,000
International assets managed	$30,000,000
401(k) and 457 assets managed	$1,220,000,000
Passive assets managed	$25,729,000,000
Minimum separate account	$25,000,000
Types of accounts managed	CEFGJ
No. of portfolio managers	8
Size of research staff	3

Wells Fargo Investment Advisors is an equity, fixed-income, balanced and international manager, specializing in index management.

The equity approach is passive and quantitative. The firm offers index funds that replicate the various segments and returns of the U.S. and international equity markets.

Stock index futures are used.

In fixed income, the firm creates highly structured and well-diversified index funds that replicate various market sectors including the Shearson Lehman index.

The asset mix Jan. 1 was 80% stocks, 10% bonds, 4% cash and 6% portfolio insurance.

Wells Fargo Investment Advisors is a subsidiary of Wells Fargo and Co.

Clients include AT&T, California Teachers, Southwestern Bell and Alcoa.

Chief investment officer is Frederick L.A. Grauer, president. Client contacts are Thomas A. Middleton and Michael J. Henman, vice presidents.

Wells Fargo Realty Advisors

330 Washington St., Marina Del Rey, Calif. 94549; (213) 822-2032

Total assets managed	$2,427,000,000
Tax-exempt assets managed	$641,000,000
Real estate assets managed	$641,000,000
401(k) and 457 assets managed	$18,000,000
Minimum separate account	$50,000,000
Tax-exempt clients	150
Types of accounts managed	CG
No. of portfolio managers	3

Wells Fargo Realty Advisors, a real estate manager, seeks investment opportunities where value can be created through development, renovation, expansion or active asset management.

The asset mix Jan. 1 was 56% equity real estate and 44% mortgages.

Clients include GM, Avon Products and Ohio Employees.

Wells Fargo Realty Advisors is a wholly owned, non-banking subsidiary of Wells Fargo and Co.

Chief investment officer is Doug Hayek, director of acquisitions. J. Michael Johnson, director of marketing, is client contact.

Wentworth Hauser & Violich

333 Sacramento St., San Francisco, Calif. 94111; (415) 981-6911

Total assets managed	$2,480,000,000
Tax-exempt assets managed	$2,260,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	100
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	3

Wentworth Hauser & Violich is an equity, fixed-income and balanced manager.

Equity portfolio characteristics are a p/e less than the S&P, yield greater than the Standard & Poor's 500, 10-year dividend growth rate double the S&P and an implied return greater than the S&P.

Fixed-income portfolios are structured to take advantage of cyclical behavior of interest rates. Emphasis is on high quality, 85% government issues and average maturity of less than five years.

The asset mix Jan. 1 was 22% stocks, 65% bonds and 13% cash.

Clients include Air Products, New Mexico, Mississippi and Southern California Edison.

Chief investment officer is W.K. Hauser, president. Client contact is Bradford Hall.

Wertheim Asset Management Services Inc.

230 Park Ave., New York, N.Y. 10169; (212) 370-6140

Total assets managed	$1,748,000,000
Tax-exempt assets managed	$1,748,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	35
Types of accounts managed	CEFGJ
No. of portfolio managers	5
Size of research staff	4

Wertheim Asset Management Services Inc. is an equity, fixed-income and balanced manager.

In equities, the firm is value oriented, emphasizing individual security selection based on fundamental analysis. Its bottom-up approach emphasizes relative value by selecting individual securities selling at reasonable p/es relative to projected earnings growth.

The firm's primary fixed-income strategy is interest rate anticipation, followed by sector rotation based on yield spread analysis. The use of cash equivalents is an integral part of fixed-income management.

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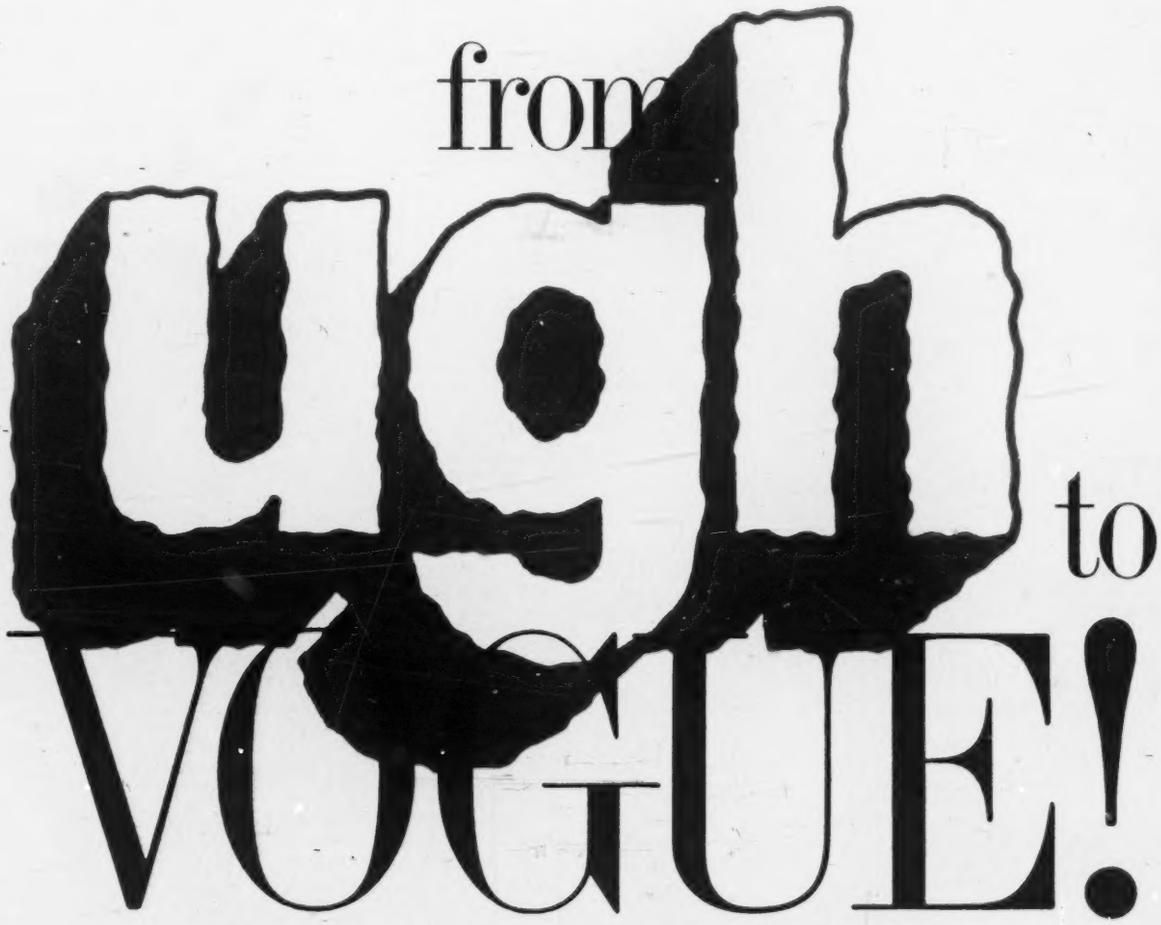

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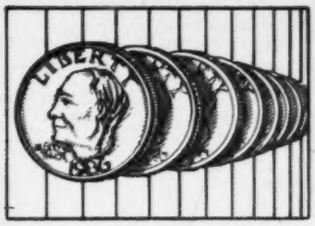

The asset mix Jan. 1 was 51% stocks, 40% bonds and 9% cash.

Clients include NYNEX, Michigan Legislative Retirement System, United Technologies and Central Maine Power.

Chief investment officer is Ernest N. Mysogland, president. Client contact is Steven W. Golann, senior vice president.

Wertheim-Philippe International

230 Park Ave., New York, N.Y. 10169; (212) 370-6140

Total assets managed	$390,000,000
Tax-exempt assets managed	$78,000,000
International assets managed	$73,000,000
Minimum separate account	$10,000,000
Tax-exempt clients	3
Types of accounts managed	CG
No. of portfolio managers	6
Size of research staff	6

Wertheim-Philippe International, an international manager, uses an investment style that incorporates both a top-down and bottom-up methodology. Equal weight is placed on the country, sector and stock decisions. Portfolios contain 100 issues, of which one-third are smaller-cap securities.

The asset mix Jan. 1 was 88% stocks and 12% cash.

The joint venture is owned by Wertheim Asset Management and the Philippe Group.

Chief investment officer is Beatrice Philippe, managing director. Client contact is Steven W. Golann, managing director.

Western Asset Management

707 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-3156

Total assets managed	$3,267,000,000
Tax-exempt assets managed	$2,214,000,000
Real estate assets managed	$400,000,000
401(k) and 457 assets managed	$20,000,000
Passive assets managed	$125,000,000
Minimum separate account	$25,000,000
Tax-exempt clients	22
Types of accounts managed	CEFG
No. of portfolio managers	7
Size of research staff	3

Western Asset Management Co. is a fixed-income manager.

The firm's approach seeks to capture high levels of income and to exploit a broad range of market inefficiencies. The portfolio team concentrates on sector balancing and undervalued security holdings.

The Jan. 1 tax-exempt asset mix was 55% bonds, 25% cash and 20% mortgage-backed securities.

As of Jan. 1, it had $25 million in bond index funds and $100 million in dedicated or immunized portfolios.

Clients include Lockheed, The Common Fund, Minnesota and AT&T.

The firm is a wholly owned subsidiary of First Interstate Investment Services, the investment holding subsidiary of First Interstate Bancorp.

W. Curtis Livingston, president and chief executive officer, is chief investment officer. Randolph L. Kohn, director of marketing, is client contact.

Western Reserve Capital Management Inc.

LTV Center, 44th Floor, P.O. Box 225003, Dallas, Texas 75265-5003; (214) 979-7770

Total assets managed	$600,000,000
Tax-exempt assets managed	$600,000,000
International assets managed	$60,000,000
Tax-exempt clients	1
Types of accounts managed	C
No. of portfolio managers	5

Western Reserve Capital Management Inc. is an internal corporate manager for the combined Republic Steel/LTV Corp. pension funds.

The equity approach combines large-cap, diversified, special growth, international and venture capital partnership investments.

The Jan. 1 tax-exempt asset mix was 63% stocks, 21% cash, 10% international and 6% venture capital.

The firm is a wholly owned subsidiary of The LTV Corp.

Dennis J. Hamilton, president, is chief investment officer and client contact.

Westminster Realty Advisors

9720 Wilshire Blvd., Beverly Hills, Calif. 90212; (213) 858-8117

Total assets managed	$25,000,000
Tax-exempt assets managed	$3,000,000
Real estate assets managed	$3,000,000
401(k) and 457 assets managed	$1,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	4
Types of accounts managed	C

Westminster Realty Advisors is a real estate manager seeking above-average growth and income.

As of Jan. 1, all tax-exempt assets were in equity real estate.

Gary A. Aminoff, chairman and chief executive officer, is chief investment officer. Mr. Aminoff and M.J. Segal, president, are client contacts.

Westwood Management

780 Third Ave., New York, N.Y. 10017; (212) 573-2433

Total assets managed	$305,000,000
Tax-exempt assets managed	$290,000,000
401(k) and 457 assets managed	$10,000,000
Minimum separate account	$15,000,000
Tax-exempt clients	15
Types of accounts managed	CEF
No. of portfolio managers	1
Size of research staff	3

Westwood Management Corp. is an equity manager.

The firm uses top-down active asset allocation stressing cash, bonds and options in addition to stocks.

It also uses stock index futures and fixed-income futures.

The Jan. 1 tax-exempt asset mix was 85% stocks and 15% cash.

Managers follow 35 stocks closely, 75 generally; 40% of research is generated internally.

Clients include Georgia-Pacific, Texas Instruments, New York City Teachers and Champion International.

The firm is 25% owned by Merchants Bank of Boston.

Susan M. Byrne, president, is chief investment officer. David W. Jennings, executive vice president, is client contact.

Wheat Investment Advisors

707 E. Main St., Richmond, Va. 23219; (804) 649-2311

Total assets managed	$473,000,000
Tax-exempt assets managed	$326,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	83
Types of accounts managed	CEFG
No. of portfolio managers	7

Wheat Investment Advisors Inc. is an equity and balanced manager.

It takes a top-down equity approach with sector rotation. Preservation of capital is stressed. Options are used.

In fixed income, managers use government and agency issues with maturities ranging from one to 10 years.

The Jan. 1 tax-exempt asset mix was 64% stocks, 20% bonds and 16% cash.

Clients include James River Corp., D.C. Retirement System, University of Richmond and Universal Leaf Tobacco.

The firm is a wholly owned subsidiary of WFS Financial Corp.

Huntley G. Davenport, president, is chief investment officer. Thomas T. Rankin, vice president, is client contact.

Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-8518

Total assets managed	$14,000,000,000
Tax-exempt assets managed:	
Total	$10,000,000,000
Commingled accounts	$300,000,000
Separate accounts	$9,700,000,000
International assets managed	$16,000,000
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	500
Separate	200
Types of accounts managed	CEFGJ
No. of portfolio managers	6
Size of research staff	7

Wilmington Trust Co. is an equity, fixed-income, balanced and international manager, with options capabilities.

The equity approach seeks high-quality stocks priced at relatively low p/e levels. The bank blends fundamental analysis with modern analytical techniques to define value.

In fixed income, active management with a mathematical timing model is used with Treasury securities only. Fixed-income futures are used.

The Jan. 1 tax-exempt asset mix was 60% stocks, 30% bonds and 10% cash.

Managers follow 100 stocks closely and 200, generally; 80% of research is generated internally.

Clients include Kaiser Aluminum & Chemical, Scientific-Atlanta, Iowa State University and Washington Suburban Sanitary Commission.

Daryl L. Hudson, vice president-fixed income, and James V. Kelly, vice president-equity, are chief investment officers. David W. Umbs, vice president, is client contact.

Wilshire Associates Asset Management Division

1299 Ocean Ave., Suite 700, Santa Monica, Calif. 90401; (213) 451-3051

Total assets managed	$2,050,000,000
Tax-exempt assets managed	$2,050,000,000
Passive assets managed	$2,050,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	8
Types of accounts managed	CEFG
No. of portfolio managers	2
Size of research staff	1

Wilshire Associates Asset Management Division specializes in equity index funds. Stock index futures are used.

As of Jan. 1, all assets were in equities.

Managers follow 5,000 stocks generally.

Clients include Minnesota, D.C. Retirement System, North Dakota Teachers and Southern Presbyterian Churches.

Wayne H. Wagner, is chief investment officer. Edward Story, director of marketing, is client contact.

Wilson, Kemp & Associates

400 Renaissance Center, Detroit, Mich. 48243; (313) 259-6210

Total assets managed	$205,000,000
Tax-exempt assets managed	$125,000,000
Minimum separate account	$250,000
Tax-exempt clients	65
Types of accounts managed	CFG
No. of portfolio managers	2

Wilson, Kemp & Associates Inc. is a balanced manager.

Its equity approach is based on Graham & Dodd, and its fixed-income approach on interest rate anticipation.

The Jan. 1 tax-exempt asset mix was 60% stocks, 30% bonds and 10% cash.

Managers follow 75 stocks closely and 300, generally; 5% of research is generated internally.

Thomas A. Wilson and Robert D. Kemp Jr., principals, are chief investment officers and client contacts.

Winchester Capital Management Co.

1 Federal St., Boston, Mass. 02110; (617) 482-3001

Total assets managed	$260,000,000
Tax-exempt assets managed	$186,000,000
International assets managed	$5,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	51
Types of accounts managed	CFG
No. of portfolio managers	5

Winchester Capital Management Co. is an equity manager.

Its equity approach uses fundamental identification of industry subgroups where several companies meet the firm's risk and price objectives.

In fixed income, managers use interest rate forecasts, yield curve and possible rating upgrade to determine mix and suitability of bonds.

The Jan. 1 tax-exempt asset mix was 81% stocks, 10% bonds and 9% cash.

Sidney R. Stern, principal, is chief investment officer and client contact.

Winrich, Schaenen & Wood

23702 Birtcher Drive, Lake Forest, Calif. 92630; (714) 380-0200

Total assets managed	$235,000,000
Tax-exempt assets managed	$143,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	45
Types of accounts managed	CFGJ
No. of portfolio managers	5
Size of research staff	3

Winrich, Schaenen & Wood Inc. is an equity and balanced manager.

In equities, managers concentrate on low p/e companies with strong balance sheets and unrecognized assets.

Its fixed-income approach is conservative, seeking only the highest quality securities. Average maturities are adjusted in response to the interest rate outlook using the yield curve.

The Jan. 1 tax-exempt asset mix was 61% stocks, 28% bonds and 11% cash.

Darrell J. Winrich, chairman and president, is chief investment officer. Kurt R. Winrich, vice president, is client contact.

William D. Witter Inc.

153 E. 53rd St., New York, N.Y. 10022; (212) 753-7878

Total assets managed	$420,000,000
Tax-exempt assets managed	$323,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	33
Types of accounts managed	CEFG
No. of portfolio managers	3
Size of research staff	2

William D. Witter Inc. is an equity and balanced manager.

The firm's investment philosophy emphasizes value. Managers seek greater relative returns through mid-sized, high-quality, growth companies with sound balance sheets.

The Jan. 1 tax-exempt asset mix was 90.3% stocks and 9.7% cash.

Managers follow 110 stocks closely and 150, generally; 45% of research is generated internally.

Clients include Oregon, Syntex, University of Southern California and W. Alton Jones Foundation.

William D. Witter, president, is client contact.

Wolf, Webb, Burk & Campbell Inc.

260 S. Broad St., Suite 901, Philadelphia, Pa. 19102; (215) 735-5910

Total assets managed	$350,000,000
Tax-exempt assets managed	$350,000,000
Minimum separate account	$5,000,000
Tax-exempt clients	27
Types of accounts managed	CEFGJ
No. of portfolio managers	4

Wolf, Webb, Burk & Campbell Inc. is an equity, fixed-income and balanced manager.

For equity-oriented investments, the firm follows a sector rotation, value-oriented, market-timing approach.

Fixed-income strategy is keyed to interest rate anticipation, market timing and some sector swapping.

The Jan. 1 tax-exempt asset mix was 45% stocks, 40% bonds and 15% cash.

Clients include BIC, Peoples Energy, Skidmore College and Wichita, Kan.

Jerry Wolf, president, is chief investment officer. Bill Campbell, vice president, is client contact.

M.K. Wong & Associates Ltd.

Suite 2520, 1066 W. Hastings St., Vancouver, British Columbia V6E 3X1; (604) 669-4555

Total assets managed	$1,786,000,000(U.S.)
Tax-exempt assets managed:	
Total	$1,679,000,000
For subsidiaries of U.S. firms	$321,000,000
Minimum separate account	$7,000,000
Tax-exempt clients:	
Total	75
U.S. subsidiaries	14
Types of accounts managed	CEPU
No. of portfolio managers	6
Size of research staff	1

M.K. Wong & Associates Ltd., a Canadian firm, is a balanced manager.

The firm takes a top-down approach to asset mix decisions as well as to industry and security selection.

The firm's fixed-income approach uses interest rate anticipation. Most bonds are of high quality and liquidity to facilitate shifts between asset classes.

The mix Jan. 1 of tax-exempt assets was 40% Canadian stocks, 50% bonds

Key to abbreviations

C: Corporate accounts
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian advisers only)

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Washington, D.C. 20036 202/939-6500

and 10% U.S. stocks.

Forty stocks are followed closely, and 60, generally; 25% of research is generated internally.

M.K. Wong & Associates Ltd. is an affiliate of MKW Personal Investment Management.

Chief investment officer is Milton K. Wong. Client contact is Wayne Deans.

Wood, Struthers & Winthrop Management Corp.

140 Broadway, 42nd Floor, New York, N.Y. 10005; (212) 504-4000

Total assets managed	$1,200,000,000
Tax-exempt assets managed	$375,000,000
401(k) and 457 assets managed	$10,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	79
Types of accounts managed	CEFJ
No. of portfolio managers	6
Size of research staff	2

Wood, Struthers & Winthrop Management Corp. is an equity, fixed-income and balanced manager.

In equities, security selection is guided by fundamental research, screened within the context of valuation techniques. Holdings are concentrated by sectors, emphasizing industry leaders with an identifiable earnings growth pattern. Options and stock index futures are used.

Fixed-income management focuses on maturity risk to ensure preservation of capital and a real rate of return over an interest rate cycle. Fundamental research is used.

The tax-exempt asset mix Jan. 1 was 60% stocks, 27% bonds and 13% cash.

Clients include the Raleigh News & Observer and American Can.

The firm is a subsidiary of Donaldson, Lufkin & Jenrette Inc., which is a subsidiary of The Equitable Life Assurance Society of the United States.

Client contact is Charlotte B. Beyer, vice president.

Wright Investors' Service

10 Middle St., Bridgeport, Conn. 06604; (203) 333-6666

Total assets managed	$2,495,000,000
Tax-exempt assets managed	$2,301,000,000
Passive assets managed	$191,000,000
Minimum separate account	$1,000,000
Tax-exempt clients	95
Types of accounts managed	CEFGJ
No. of portfolio managers	7
Size of research staff	25

Wright Investors' Service is an equity, fixed-income and balanced manager.

The firm offers three equity products: Quality Core, which stresses quality growth and broadly diversified securities; Blue Chip, which stresses active growth securities; and Junior Blue Chip, which emphasizes smaller, well-established growth companies.

In fixed income, interest rate anticipation is emphasized. Dedicated bond portfolio service is also offered.

The Jan. 1 tax-exempt asset mix was 67.5% stocks, 30% bonds and 2.5% cash.

Managers follow 360 stocks closely and 2,000, generally. All research is generated internally.

Judith R. Corchard, senior vice president and senior investment officer, is chief investment officer. Albert L. Meric Jr., senior vice president, is client contact.

y

Yamaichi Capital Management Inc.

2 World Trade Center, No. 9666, New York, N.Y. 10048; (212) 912-6484

Total assets managed	$68,000,000
Tax-exempt assets managed	$53,000,000
International assets managed	$7,000,000
Minimum separate account	$2,000,000
Tax-exempt clients	3
Types of accounts managed	CG

Yamaichi Capital Management Inc. is an equity, fixed-income, balanced and international manager.

Its equity approach seeks growth through investments in medium-size and blue-chip companies with secular growth characteristics, sound financials and good management.

In fixed income, active switches are conducted on the basis of interest rate forecasts.

The Jan. 1 tax-exempt asset mix was 95% stocks and 5% cash.

Yamaichi International Capital Management Co. Ltd. is the parent.

Kiyotoshi Aiba, director, is chief investment officer.

Masatoshi Minami, president, is client contact.

Yield Management Group

Suite 1130, 20 Toronto St., Toronto, Ontario M5C 2B8; (416) 364-3711

Total assets managed	$672,000,000(U.S.)
Tax-exempt assets managed:	
Total	$182,000,000
For subsidiaries of U.S. firms	$18,000,000
Minimum separate account	$5,000,000
Tax-exempt clients:	
Total	30
U.S. subsidiaries	1
Types of accounts managed	CU
No. of portfolio managers	3

Yield Management Group, a Canadian firm, is an equity and fixed-income manager that also specializes in cash, futures and options.

In equities, stocks are screened for specific historic characteristics, e.g. low price/book, high ROE. An optimization model is used to develop portfolios.

In fixed income, techniques range from immunization to return optimization under various interest rate scenarios. Sector analysis is used.

The asset mix Jan. 1 was 10% Canadian stocks, 35% bonds and 55% cash.

Eric Innes is chief investment officer and client contact.

Yorkshire Trust

1100 Melville St., Vancouver, British Columbia V6E 4B6; (604) 685-3711

Total assets managed	$350,000,000(U.S.)
Tax-exempt assets managed	$10,000,000
Real estate assets managed	$4,000,000
International assets managed	$2,000,000
Tax-exempt clients	16
Types of accounts managed	CFP
No. of portfolio managers	2

The Yorkshire Trust, a Canadian firm, is an equity, fixed-income, balanced and real estate manager.

In equities, the firm relies on emerging growth, low p/e and sector rotation.

Its fixed-income approach depends on interest rate anticipation.

In real estate, a committee reviews each property and considers projected and cash-on-cash account returns.

The asset mix Jan. 1 was 32% Canadian stocks, 33% bonds, 8% cash, 10% equity real estate, 10% mortgages and 7% U.S. stocks.

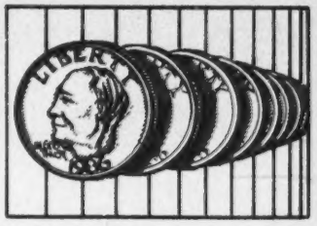
Peter Stuart, vice president and treasurer, is chief investment officer. Paul Hazell, assistant general manager, is the client contact.

z

Zavanelli Portfolio Research

729 S. Prospect, Park Ridge, Ill. 60068; (312) 823-6718

Total assets managed	$14,000,000
Tax-exempt assets managed	$11,000,000
Minimum separate account	$100,000
Tax-exempt clients	25
Types of accounts managed	CF
No. of portfolio managers	3
Size of research staff	3



Zavanelli Portfolio Research is an equity manager.

The firm uses operation research techniques, game theory and theories of investor behavior to find stock market inefficiencies.

Managers pursue maximum appreciation but hedge to minimize risks.

As of Jan. 1, all tax-exempt assets were in stocks.

Clients include Aluminum Design and Frankel Furniture.

Max Zavanelli, president, is chief investment officer. Cecil Suter, executive vice president, is client contact.

Insurers lead . . .

Continued from page 2

marketing at Favia, Hill, said the main reason for the drop was the loss of a $2.6 billion bond account from the New York City Teachers Retirement System in preparation for the fund's move to indexing.

Favia, Hill also lost some equity accounts for a variety of reasons.

Other firms with significant decreases in tax-exempt assets under management include: National Bank of Detroit, with $5.7 billion, down 32% from $8.37 billion the previous year; Manufacturers National Bank of Detroit, with $1.26 billion, down 58% from $3 billion; and First National Bank of Atlanta, with $1.4 billion, down 52% from $2.9 billion.

(The profile listing for Citicorp Investment Management Inc., New York, shows the firm had $23.917 billion in total assets and $17.938 billion in tax-exempt assets under management as of Jan. 1, down from $25 billion in total assets and $21.5 billion in

(Michele Alifanz, vice president at Citicorp, said the listing in the 1985 directory included both discretionary and non-discretionary assets, while the 1986 listing includes only discretionary tax-exempt assets.

(She said Citicorp had $34.9 billion in total assets and $28.6 billion in tax-exempt assets under management as of Jan. 1.

(The tax-exempt figure includes about $5 billion in assets managed in the international offices of Citicorp Investment Management that were not included the previous year.)

Equitable Life Assurance, the parent of several other firms, listed each of its subsidiaries separately this year, and did not report any assets under management for the parent company. ■

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A 'bible' for modern-day investors

Following the 10 commandments of GICs

Feature

WHEN Moses returned from Mount Sinai, he delivered the commandments for daily living.

Centuries later, two fellows with the names Graham and Dodd set forth the commandments that have become the modern-day dogma for portfolio management.

As time has progressed others have added to these investment commandments. However, all have ignored the guaranteed investment contract.

Just as man should abide by the injunctions delivered by Moses, so, too, should GIC users abide by the 10 commandments of GICs.

1. Thou shalt not buy at insufficient yield spreads

Investors should assess the strength of GIC rates relative to market benchmarks. The absence of sufficient yield spreads as measured against equivalent durations is reason to question the appropriateness of the purchase of a GIC of a particular duration, or the purchase of a GIC at all at a particular time. The GIC buyer must answer the questions: Should I buy now or wait? If I must purchase, what term should I buy?

The accompanying chart illustrates the logic of this caution. Based on insurer quotes and Treasury rates of January, the chart shows, for instance, GIC maturities beyond three years produce diminishing spreads compared to equivalent Treasury maturities.

The longer-term GIC investor is not being paid enough premium, if any, to extend beyond the peak in the yield spread. Unless there is just cause for buying beyond this peak (such as a sponsor's need for a particular maturity), the investor will make his or her most efficient purchases at those points where the spreads are the greatest.

2. Thou shalt not buy at the low end of the quote range

One of the insufficiencies in the GIC marketplace is the differential between the lowest and highest quotes on any given purchase. Where there may be a 1/16th of a point difference between two bidders for a Treasury issue, it is not uncommon to find a 1½ percentage point differential between the highest and lowest insurance company GIC offering. Differences arise not necessarily from quality considerations, but from inventories within the insurer's investment department, the asset mix within its general account, allocation of interproduct-line expenses and profit motivations.

3. Thou shalt not purchase without premiums for added risk

In today's GIC marketplace, the greatest inefficiency concerns the lack of correlation between risk and return. The fundamental law of investment management is the greater the perceived risk, the greater the required return. GICs do not always abide by this rule. High rates do not necessarily reflect lower quality issuers, and, conversely, low rates do not necessarily reflect higher quality.

Insurance companies are subject to the same risk as other corporate entities, particularly those in the financial services industry. The past few years have provided a warning on risks inherent in the banking and insurance industries.

Insurance is one of the hardest industries to analyze, due partially to statutory accounting in lieu of generally accepted accounting principles and due to the limited amount of information being provided by the industry.

As such, the untrained analyst has difficulty in assessing the underlying quality of the carrier. Most rely on name recognition and external rating services. Such services typically do not make adequate comparisons among different companies on a best-to-worst scenario.

The established, larger carriers persist in their claim that size and experience connote overall financial strength and quality of product, while many of the smaller and newer entrants argue their size allows greater flexibility in reacting to changing market conditions.

Many of the smaller companies argue their general accounts are not plagued with older, lower-yielding investments often found in larger companies, the same argument often used by newer banks and savings and loan associations.

Despite the validity of the smaller companies' argument, the end result is that most plan executives still place their faith in familiar names.

Without the ability to rely on the market efficiencies to distinguish between quality, the GIC user must establish some basis for evaluation. Since the market does not provide this opportunity, GIC users are often subject to unknown risks and hence are not paid for these added risks.

4. Thou shalt not invest without allowing for sufficient liquidity

Most investment portfolios are designed to account for liquidity needs. The GIC portfolio must assure liquidity is provided, whether for planned or unplanned needs. Whereas stocks, bonds, and cash equivalents are marketable, GICs are not.

GIC portfolios plan for these needs in two ways. First, the portfolio can incorporate a laddered approach coupled with cash reserves. Second, it can use benefit-responsive contracts. The first approach does not assure complete liquidity risk aversion; the second does. A sure bet for eternal misery is insufficient cash to pay off participants or beneficiaries.

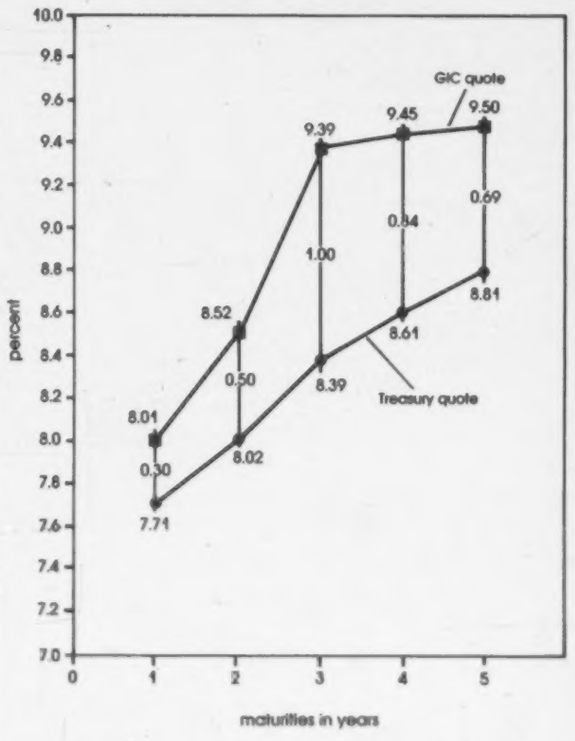
5. Thou shalt not put all thy eggs in one basket

Diversification is one of the basic laws of prudent investment management; it minimizes risk exposure.

Many plan executives ignore this when purchasing GICs. An executive would never allow a bond manager to invest all its assets with one corporate issuer. So why should all GIC assets be held by one or two insurance carriers? It is important to remember that protection to the GIC policyholder is nothing more than the

Continued on page 115

GIC maturity pricing model and treasury spread comparison



Source: Insurance quotes collected from 30 to 50 firms by Capitoline Investment Services Inc., Richmond, Va., as of Jan. 31.

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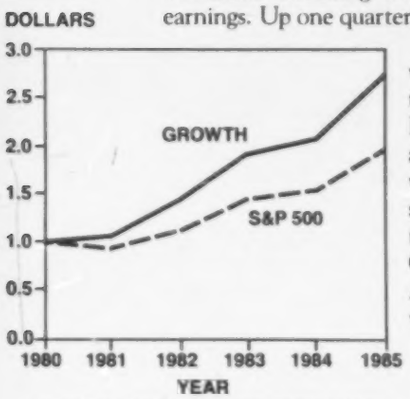

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Some firms manage . . .

Continued from page 4

and down figures."

Mr. Shroeder said the fluctuations were coincidental, adding that the recent dip in assets is due to insufficient marketing efforts. He said that's changing. "We're ready to come out of our shell."

"Firms like Axe and Babson were in a growth-stock style that didn't have much market presence over the last 10 years. It was a stable area but not a flashy area like the others," commented Ronald D. Peyton, president of Callan Associates Inc., San Francisco.

"Once you lose an account or two, it's really tough to get back," said Dwayne Cooper, vice president of the consulting firm Jesup & Lamont Investment Services Inc., Mission Viejo, Calif.

"New firms (in the past decade) needed to promote themselves as something special," he added. "Someone new had to have a niche."

10 commandments . . .

Continued from page 114
full faith and credit of the issuing organization, senior to general creditors.

6. Thou shalt not overlook contractual terms

Contract provisions, such as maturity date, plan compliance, premature termination terms, and market value formula, are far too important to be neglected prior to signing on the dotted line. As each of the following examples illustrates, this inattention can be significant.

• *Contract maturity.* Maturity is not always a specific date. Many contract holders have discovered that an event must trigger contract book-value payout. An event may include:

a) A revised interest rate guarantee. Some contracts don't assure GIC holders payment at maturity, but rather give them a choice of either accepting a new declared rate for a new period, or taking a lump sum at current market value or an installment payout over several years at book value.

b) A reduction in the interest rate. Some GICs allow the insurer to lower the rate during the contract period.

c) Withdrawal experience of the general account. Some insurers have general account withdrawal protection, whereby they retain the right to postpone payments any year net withdrawals exceed net deposits.

• *Plan compliance.* Contractual provisions are often discovered to be in violation of plan provisions. This has occurred in such areas as allowable investment crossovers, amount and timing of transfers, benefit withdrawals. For example, some insurers that provide a GIC for a 401(k) plan demand the sponsor not allow any competing fixed-income investment alternative, such as a money market fund.

Scrutiny for concurrence between plan provisions and GIC terms is essential.

• *Premature termination.* Many contracts do not allow GIC termination prior to maturity unless the request stems from plan termination. Investing in longer duration contracts without termination flexibility limits responsiveness to plan needs in future years.

On the other hand, many contracts that provide a premature termination provision have no predefined market value formula. Leaving the formula to the discretion of the carrier can create problematic circumstances when this option is pursued.

7. Thou shalt not ignore the contract guarantor

This aspect becomes increasingly important as more insurers establish pension subsidiaries or separate accounts to issue GIC contracts. Often these subsidiaries are undercapitalized and funded only to support growth and required reserve levels. To minimize risk, a policyholder should obtain the endorsement of the parent organization, assuring its full faith and backing in the event of subsidiary insolvency.

Separate account GICs should be scrutinized to determine the protection afforded. This investigation determines whether the separate account carries the backing of the parent, without reciprocal recourse of the parent to access the assets of the separate account.

8. Thou shalt not allocate improperly among asset classes

Improper asset allocation can hinder meeting fund objectives. GICs provide stable investment returns; GICs do not provide market appreciation. The investor that is looking to obtain substantial gains should not incorporate the use of GICs. The investor that is looking for no volatility should not be heavily weighted in equities. Where one asset allocation mix works well for one plan, it may not necessarily be the proper mix for another.

9. Thou shalt not neglect continual review

This process should include a review of the contract, plan design and returns. The contract holder should periodically review the terms of the contract in regard to their competitiveness with other available contracts.

Also, contract provisions should be analyzed as they pertain to the plan provisions. Changes in plan design should be reviewed prior to implementation to determine their effect on the contract.

Finally, but certainly not least important, annual audits of the financial statements must be performed to ensure the proper crediting of interest.

10. Thou shalt consider GICs a manageable asset class

As the fastest growing asset class, estimated at a $20 billion growth in 1985, why shouldn't GICs be considered a manageable instrument? A little of this type of GIC contract (bullet), a little of that type of contract (indexed), and a little bit more of another type of contract (window), with a little of this maturity and a little of that maturity provide the opportunity to actively manage the fund as a fixed income portfolio.

Proper buying, proper timing and proper duration management can lead to a more aggressively managed portfolio. Professional managers and in-house management alike have begun to recognize the merits and prudence of employing techniques for GIC portfolios that are similar to those employed for other traditional portfolios.

To avoid an eternity of financial misery, the GIC user should abide by these financial commandments. In a market of many tempting inefficiencies, there is great need for care. ■

Kenneth L. Walker is vice president of Capitoline Investment Services Inc., Richmond, Va.

Feature

Passive accounts . . .

Continued from page 2
Although the bond indexing concept has been around for about 10 years, it is only in the past two years that pension fund executives have been pouring money into it.

That's because they were waiting for a fixed-income benchmark akin to the S&P 500, according to those interviewed.

It is only in the last five years that the Shearson Lehman Government/Corporate bond index has gained acceptance as the benchmark.

And during the past six months, a spate of new fixed-income indexes has arisen, including the Salomon Brothers Broad Investment Grade Bond Index, the Merrill Lynch Domestic Master Bond Index and a souped-up Shearson/Lehman Aggregate Bond Index.

All are clamoring to be acknowledged as the standard.

That din may create some confusion, bond index marketers concede, but they don't expect it to slow the spreading popularity of the concept.

Another reason bond indexing was slowed is the perception that the main form of passive fixed-income management was dedication and immunizing, said Rick Nelson, vice president and head of the passive management group at Bankers Trust — Investment Management Group.

Those products "cannibalized" any potential bond indexing business, he said.

But now that interest rates are low, there hasn't been much activity in dedication and immunizations, resulting in the widening of passive fixed-income management to include bond indexing.

Now, pension fund executives are turning to indexing because they want "safety and diversity with upside potential," said Tom Heneghan, Equitable's vice president of marketing. Equitable manages fixed-income index funds and dedications and immunizations.

The leading bond index managers are Mellon Bank, Pittsburgh, with $3.6 billion as of Jan. 1; Wells Fargo, $2.3 billion; State Street Bank, $1.1 billion; Bankers Trust, $1 billion; and American National Bank, $800 million.

In dedications and immunizations, the $35.7 billion reported as of Jan. 1 is almost twice the $18.1 billion reported by the 200 largest pension funds as of Sept. 30 (*P&I Age*, Jan. 20). The increase suggests that many smaller pension funds also are using the techniques.

Managers agreed, however, that the $35.7 billion was primarily old money. Keith Schappert, managing director of the fixed-income department for J.P. Morgan Investment Inc., New York, said that because of the long-term nature of such products, those portfolios probably had appreciated 20% to 30%.

J.P. Morgan has $5.7 billion in dedicated and immunized portfolios, mainly in duration matching, making it the leading manager in that area.

A dedicated portfolio is structured so the cash flow of returns from investments match liabilities as they come due.

Immunization, a form of dedication, is structured so the duration of the holdings in a portfolio match the duration of known liabilities.

Mr. Schappert said the Financial Accounting Standards Board's Statement 87, which requires pension funds to report unfunded liabilities on the balance sheet, may spur renewed interest in dedications.

"Fund sponsors don't want to run the risk of becoming underfunded and having to report it," he said.

"If liabilities are $100 million given certain interest rate assumptions, and then interest rates drop 200 basis points, it costs more to fund liabilities. If the fund uses a bond portfolio with duration similar to liabilities, then the portfolio should appreciate the same way the cost increases," Mr. Schappert said.

Joseph Gorman, president of National Investment Services of America, Milwaukee, agreed FASB 87 would focus more attention on dedication.

NISA is the second largest player in the area, with $3.75 billion.

Mr. Gorman acknowledged dedication is more attractive when interest rates are high, but he added, "It is a good principle at any interest rate."

"Once you match assets and liabilities, then you are out of the risk game," he said.

Following J.P. Morgan and National Investment Services in providing dedicated and immunized portfolios are Prudential, with $3.6 billion; Bankers Trust, $2.3 billion; and Manufacturers Hanover Investment Corp., New York, with $1.8 billion.

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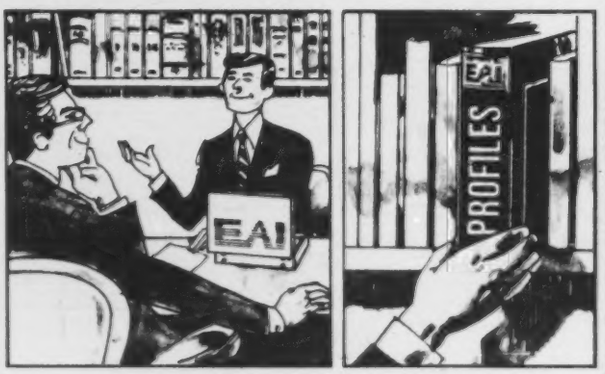

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Top 100 assets surge . . .

Continued from page 1

equity real estate, 2% mortgages, 2% mortgage-backed securities and 1% other.

The Jan. 1, 1986, average asset mix for all managers surveyed was 55% equities, 24% bonds, 10% cash, 5% equity real estate, 2% mortgages, 1% mortgage-backed securities and 3% other.

The average mix for all managers a year ago was 52% equities, 26% bonds, 12% cash, 5% equity real estate, 2% mortgages, 1% mortgage-backed securities and 2% other.

All banks surveyed reported an average tax-exempt asset mix as of Jan. 1 of 48% equities, 36% bonds, 11% cash, 1% equity real estate, 1% mortgages, 2% mortgage-backed securities and 1% other. Insurance companies had 46% in stocks, 21% in bonds, 12% in cash, 9% in equity real estate, 6% in mortgages, 2% in mortgage-backed securities and 4% other on that date. Investment counselors reported 56% in stocks, 22% in bonds, 10% in cash, 5% in equity real estate, 2% in mortgages, 1% in mortgage-backed securities and 4% other.

Canadian managers had 33% in Canadian equities, 38% in bonds, 11% in cash, 4% in equity real estate, 3% in mortgages, 10% in U.S. equities and 1% other on Jan. 1.

Among particular investments, guaranteed investment contracts, international and equity real estate showed dramatic gains.

The 25 largest managers of GICs reported a 31% increase in GIC investments, to $85 billion from $65 billion in 1984. Metropolitan Life had the largest amount in GICs, $14 billion, followed by Equitable, $13.6 billion; Aetna Life, $12 billion; The Travelers Companies, $8 billion; and Prudential, $7 billion.

Tax-exempt assets managed by the 25 largest international managers also saw a healthy leap in 1985, increasing 50% to $18 billion from $12 billion in 1984. Total assets managed by international managers in 1985 were $33 billion, up from $29 billion in 1984, thanks to an active international stock market.

The largest international managers in 1985, according to the survey, were J.P. Morgan, with $3.1 billion; Fiduciary Trust Co. of New York, with $2.5 billion; Chase Investors Management Corp., with $2.1 billion; Morgan Grenfell Investment Services Ltd., with $2 billion, and Capital Guardian Trust Co., with $1.9 billion.

Assets managed by the 25 largest real estate managers ranked by equity real estate assets for tax-exempt clients increased 22% during the year ended Jan. 1. Real estate managers reported $39 billion invested in equity real estate in 1985, compared with $32 billion in 1984.

The largest real estate managers ranked by equity real estate, according to the survey, were Prudential, with $6 billion; Equitable, $4 billion; Copley Real Estate Advisors Inc., $3.5 billion; Corporate Property Investors, $2.4 billion, and The RREEF Funds, with $2.3 billion.

Forty Canadian managers participated in the survey this year. The largest Canadian managers, ranked by tax-exempt assets in U.S. dollars, were Corporate Investment Associates, $4.6 billion; Beutel, Goodman & Co. Ltd., with $3.3 billion; Jarislowsky, Fraser & Co., $2.5 billion; Confed Investment Counselling Ltd., $2.1 billion; and Manufacturers Life Insurance Co., $1.9 billion.

The 846 managers surveyed employed 5,479 portfolio managers and 4,572 security analysts as of Jan. 1.

Banks follow an average of 149 stocks closely, insurance companies, 145, and investment counselors, 154. Banks follow an average of 573 stocks generally; insurance companies, 451, and investment counselors, 639.

Banks generate an average of 40% of research in-house. Insurance companies generate 48%, and investment counselors, 50%.

Of the 846 respondents, 220 money managers use options, 91 use stock-index futures and 82 use fixed-income futures.

New this year to *P&I Age*'s profile issue are statistics ranking the 25 largest managers of equity index funds, bond index funds, dedicated/immunized funds, mortgages and mortgage-backed securities.

The 1986 directory of investment advisers is the most complete listing of its kind. ■

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People

Managers

Harold S. Woolley has been elected senior vice president of The Bessemer Trust Cos., New York. He will be responsible for fixed-income investments, as well as serve as a senior member of the firm's investment policy and strategy committee. Mr. Woolley joins Bessemer from Equitable Investment Management Corp.

Forrest Mervine recently joined Brown Brothers Harriman, Philadelphia, as deputy manager. Prior to joining the firm, Mr. Mervine served as vice president and portfolio manager for First Pennsylvania Bank.

Robert E. Swett has been appointed president of The Security Benefit Trust Co. and vice president of qualified plans. Mr. Swett joined The Security Benefit Group of Cos., Topeka, Kan., from the Nebraska office of Touche Ross & Co. where he served as director of operations for actuarial and benefits consulting.

B. Hunt Whitbeck Jr. has joined Citicorp Investment Management Inc., New York, as director of marketing of CIMI's international funds and products to North American ERISA and institutional markets. Mr. Whitbeck joined Citibank in 1970.

Wachovia Bank and Trust Co., Winston-Salem, N.C., has made the following promotions:

Dennis R. Monroe has been elected senior vice president. He is manager of the asset management department and has been with the firm since 1979.

Lavern "Vern" P. Fransen has been elected assistant vice president of the personal trust group in Charlotte. He joined Wachovia in 1985 and is a trust account manager.

Robert M. Merritt has been elected assistant vice president in the asset management group; he is a trust account manager. **Gloria M. Melton** has been elected assistant vice president in the institutional funds management group; she is a master trust consultant.

John C. Bailey Jr., account manager in corporate trust, has been elected corporate trust officer. **Ruth Hawley** and **Marsie K. West**, master trust consultants in employee benefits, have been elected management group.

Gerald M. Daniello has been appointed vice president of Mellon Financial Services in New York. Mr. Daniello, who joined the Mellon Bank in 1982 as an assistant vice president in the community banking department, will continue to lead the middle market lending group serving Connecticut and New York state.

Rosilyn Overton and **Jairo Morales** have been named to the respective positions of vice president, marketing and senior marketing manager for Manhattan Capital Management Inc., New York.

Ms. Overton handles marketing for all investment products. Mr. Morales has worked for Mahoney & McNulty and spent several years as a company/client liaison in the area of annuity and insurance contracts.

Dick Caplinger has been named vice president of the newly established employee benefits service division of Rollins Burdick Hunter of Colorado, Denver. He previously managed the employee benefits services division of Rollins Burdick Hunter Agency of Texas.

Trust Company of the West, Los Angeles, has named **Rod H. Watson** managing director for equity research and portfolio management and **David S. Gardner** vice president-securities research.

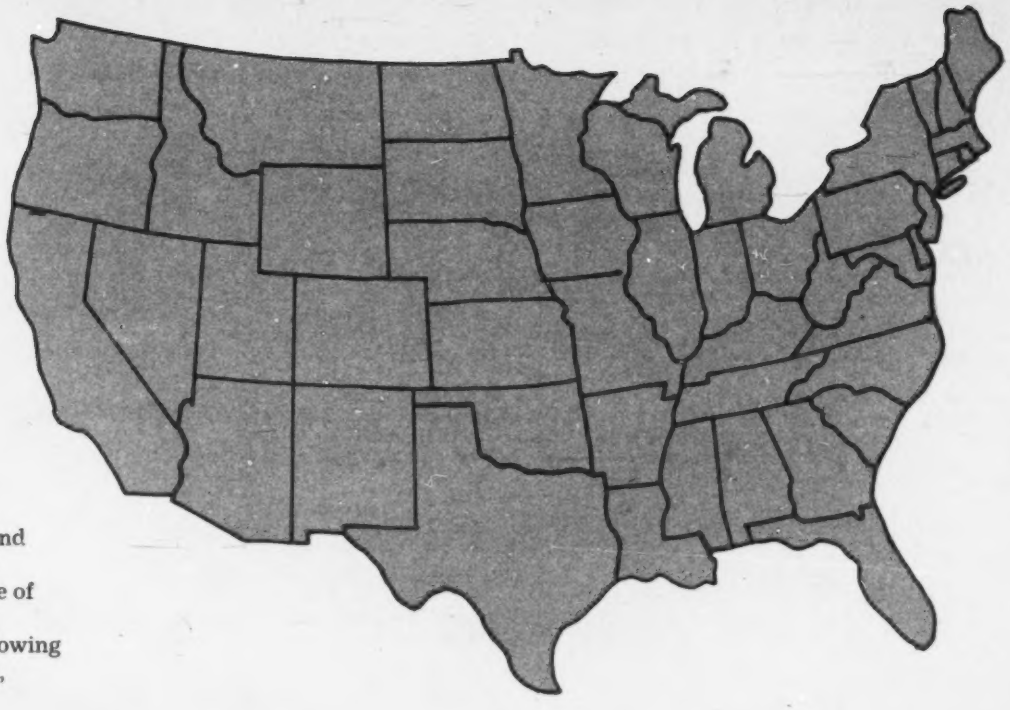
Mr. Watson, a former partner in charge of institutional equities at Mabon, Nugent & Co., will operate out of the firm's New York office. Mr. Gardner was previously a senior capital goods analyst with Crowell, Weedon & Co.

Michael J. McManus has joined The Bond Buyer, New York, as marketing manager for syndicate management services. Mr. McManus was previously a consultant to Standard and Poor's Corp., where he was responsible for evaluating unit trust portfolios.

Nigel J.B. Lovett has joined the corporate finance department of Shearson Lehman Brothers, New York, as a managing director. Mr. Lovett will provide corporate finance and merger and acquisition service to general industrial and energy companies.

He most recently served as a managing director at PaineWebber, where he directed its energy group for the past six

Money managers by location



Starting below, and continuing on pages 118 and 120, is a geographical listing of all investment management firms profiled in this special issue of *Pensions & Investment Age*. The listings are alphabetical by state, city and firm name. Following the U.S. list is a separate one of overseas firms, alphabetized by country, city and firm name.

ALABAMA

Birmingham: AmSouth Bank (Trust Division)

ARIZONA

Phoenix: Valley National Bank of Arizona
Tucson: Kronwall Capital Management Inc.

ARKANSAS

Little Rock: First Commercial Bank; Meridian Management Co.; Stephens Capital Management; Union National Trust

CALIFORNIA

Bellflower: Catanzarite Investment Advisors
Beverly Hills: Kenneth J. Gerbino & Co.; Pacific Financial Research; Westminster Realty Advisors
Cupertino: Skye Investment Advisors Inc.
Danville: James T. Cambier Investments
Glendale: Public Storage Inc.; Van Deventer & Hoch
Huntington Beach: D.A. Management Inc.
Irvine: Analytic Investment Management Inc.
La Jolla: California First Capital Management
Lafayette: Andron Cechettini & Associates
Lake Forest: Winrich Schaenen & Wood Inc.
Larkspur: Siebel Capital Management Inc.; Tukman Capital Management
Los Angeles: Anhalt/O'Connell Inc.; Capital Guardian Trust Co.; Capital Research and Management Co.; Churchill Management Corp.; CMB Investment Counselors; Coldwell Banker Capital Management Services; Cramblit & Carney Inc.; Crocker National Bank; First Interstate Bank of California; First Pacific Advisors Inc.; Froley, Revy Investment Co.; Glendeven Management and Research; Hotchkis & Wiley; Karsten Institutional Realty Advisors; Leland O'Brien Rubinstein Associates Inc.; NWQ Investment Management Co.; RNC Capital Management Co.; Security Pacific Investment Managers; Siphron & Meyers; Summit Management Co.; Transamerica Investment Services; Trust Company of the West; TSA Capital Management; Western Asset Management Co.
Marina Del Rey: Wells Fargo Realty Advisors
Menlo Park: Leylegian Investment Management Inc.
Newport Beach: Argus Investment Management Inc.; Buffalo Capital Corp.; NorthWest Quadrant Inc.; Pacific Investment Management Co.; Palley-Needelman Asset Management Inc.; PM Capital Advisors; PMRealty Advisors Inc.
Oakland: Equitec Institutional Realty Advisers Inc.
Orinda: Rosenberg Institutional E uity Management
Pasadena: Clifford Associates; Pr vident Investment Counsel; Alan G. Seidner Co.;
Rolling Hills: Allocation Advisors ıc.
Sacramento: F.I.A. Associates
San Diego: Clutinger, Williams & Verhoye Inc.; Meridian Capital Management Ltd.; icholas-Applegate Capital Management; Pacific entury Group; Rice, Hall, James & Associates
San Francisco: AMB Investments nc.; Ashfield & Co. Inc.; BA Investment Management Corp.; Bank of California; Berry Hartell & Evers; Robert C. Brown & Co. Inc.; Capital Counseling Service; Crocker Investment Management; Certus Financial Corp.; Dodge & Cox; European-American Securities Inc.; G.T. Capital Management Inc.; Hambrecht & Quist Equity Management; Kingsley, Jennison, McNulty & Morse Inc.; KRM Management; McCullough, Andrews & Cappiello Inc.; McMorgan & Co.; Mellon Capital Management Corp.; Newport Pacific Management; Pacific Asset Management; T.W. Richardson & Co.; Rosenberg Capital Management; The RREEF Funds; George B. Springman Inc.; Sumitomo Bank of California; Sutro Capital Management; Tuttle & Noroian Inc. Wells Fargo Investment Advisors; Wentworth Hauser & Violich
San Jose: Bank of the West
San Mateo: Bailard, Biehl & Kaiser Inc.; Franklin Asset Management
San Rafael: Hanson Investment Management Co.
Santa Barbara: Investors Research Co.; STW Fixed Income Management; United Security Trust Co.
Santa Monica: Dimensional Fund Advisors Inc. Sabl Associates; Wilshire Associates
Sherman Oaks: Am Cal Co.
Stockton: Tamarack Investment Counsel Inc.
Woodside: Fisher Investments

COLORADO

Colorado Springs: J.H. Ayers & Co.
Denver: Alexander, Scriver & Associates Inc.; Colorado National Bank of Denver; Denver Investment Advisors Inc.; First Interstate Bank of Denver; R.M. Leary & Co. Inc.; Nelson, Benson & Zellmer Inc.; Newhard, Cook Advisory Services Inc.; United Capital Management; Wagner & Hamil Inc.
Englewood: Cambiar Investors Inc.; Financial Trust Co.

CONNECTICUT

Avon: Leonard Management Group; Tower Capital Management Inc.
Bloomfield: Hayden, Tolzmann & Associates Inc.
Bridgeport: Wright Investors' Service
Fairfield: Sasco Capital Inc.
Glastonbury: Agrivest
Greenwich: Cheswick, Gillespie & Robinson Inc.; Gintel Equity Management Inc.; Thorson, Brown & Plunkett Inc.
Hartford: Aetna Life and Casualty Co.; Aetna MIM Asset Management Ltd.; CIGNA Corp.; Connecticut Mutual Life Insurance Co.; Connecticut National Bank; Constitution Capital Management; Hartford Life Insurance Cos.; Phoenix Mutual Life Insurance Co.; Travelers Cos.
Redding: D. Jones & Co.
Ridgefield: Macheski/Pappas Asset Management
Stamford: Copper Beech Capital Services; Target Investors Inc.
Westport: E.M. Graves Investment Management; T.J. Holt & Co. Inc.; Management Asset Corp.

DELAWARE

Greenville: Friess Associates Inc;
Wilmington: Bank of Delaware; DP Asset Management Inc.; Waycross Investment Management Co.; Wilmington Trust Co.

DISTRICT OF COLUMBIA

ASB Capital Management Inc.; Ferris Investment Advisory; National Bank of Washington; Palmieri Co.; Potomac Asset Management Inc.; Riggs National Bank of Washington D.C.; Union Labor Life Insurance Co.

FLORIDA

Coral Gables: Nicholson Group Inc.
Fort Lauderdale: Maritime Asset Management Inc.; Mercator Asset Management Inc.
Fort Myers: Wm. A. Inskeep & Co.
Gainesville: Donald P. Chiras
Jacksonville: Barnett Banks Trust Co.
Jupiter: Dawes Investment Service Inc.
Miami: Ganz Associates Inc.; United Trust Fund
Orlando: Investment Counsel Co.; MFM Capital Management Inc.; Sun Banks
Palm Beach: Palm Beach Capital Management Inc.
St. Petersburg: Eagle Asset Management Inc.; Landmark Union Trust Bank
Venice: Dale K. Ehrhart Inc.
West Palm Beach: Mortgage Investors Group Inc.

GEORGIA

Atlanta: Astrop Advisory Corp.; C&S Investment Advisors Inc.; Crawford Investment Counsel Inc.; Davis, Weaver & Mendel Inc.; Farmer & Lang Inc.; First National Bank of Atlanta; INVESCO Capital Management Inc.; Leavy Investment Management Inc.; Lesesne & Co. Inc.; Life Insurance Co. of Georgia; Montag & Caldwell Inc.; Piedmont Capital Management Associates; Professional Asset Management Inc.; Reiser-Builder Inc.; Sheffield & Co. Inc.; Trusco Capital Management Inc.; Wagner Southern Forest Investments Inc.; Wall, Patterson, Hamilton & Allen Inc.

HAWAII

Honolulu: Cadinha & Co. Inc.

IDAHO

Boise: Idaho First National Bank

ILLINOIS

Chicago: American National Bank & Trust of Chicago; Ariel Capital Management; William Blair & Co.; Capital Supervisors Inc.; Cedar Hill Associates Inc.; Chicago Corp.; Chicago Title & Trust Co.; Commodity Management Service Corp.; Concord Capital Management; Continental Assurance Co.; Continental Illinois National Bank & Trust Co. of Chicago; Duff & Phelps Investment Management Co.; Fiduciary Management Associates; First Chicago Investment Advisors; Gofen and Glossberg Inc.; Griffin Group; Hahn Holland & Grossman; Harris Trust and Savings Bank; Hedged

Location . . .

Portfolio Advisors; Heitman Advisory Corp.; Illinois Co. Inc.; Institutional Capital Corp.; Institutional Portfolio Services Ltd.; JMB Institutional Realty Corp.; Kanne, Paris & Hoban Inc.; Kemper Financial Services; Kemper-Murray Johnstone International; LaSalle Advisors Inc.; Lincoln Capital Management Co.; Lotsoff Capital Management; Mathers & Co. Inc.; Northern Trust Corp.; Penmark Investments; Rothschild Securities Corp.; Stein Roe & Farnham; Weiser Investment Management Ltd.

Elmhurst: R.W. Graybill Ltd.
Evanston: Disciplined Investment Advisors Inc.
Northbrook: Allstate Life Insurance Co.
Oak Brook: American Agricultural Investment Management Inc.; Noddings-Calamos Asset Management
Olympia Fields: Kreger Capital Management
Park Ridge: Zavanelli Portfolio Research
Rolling Meadows: Investment and Capital Management Corp.; David E. Ware & Associates Inc.
Springfield: Marine Investment Management Co.

INDIANA

Columbus: Reams Asset Management Co. Inc.
Fort Wayne: Lincoln National Life Insurance
Indianapolis: American Fletcher National Bank; Baxter & Hoops Inc.; Heartland Capital Management; Indiana Investment Advisors; Merchants Investment Counseling Inc.; Merchants National Bank & Trust Co.; Unified Management Corp.
Muncie: Merchants National Bank of Muncie
Terre Haute: Merchants National Bank

IOWA

Cedar Rapids: MidAmerica Management Corp.; Securities Counselors of Iowa Inc.
Des Moines: Bankers Life Co.; Value Investors Inc.
Sioux City: Security National Bank of Sioux City

KANSAS

Hutchinson: Hutchinson National Bank & Trust Co.
Lawrence: Santaularia & Associates Ltd.
Mission Hills: Stratton Capital Management Inc.
Overland Park: North American Capital Management; Gregory Smith & Sons Inc.; Smith Breeden Associates
Shawnee Mission: Reimer & Koger Inc.
Wichita: Bank IV Wichita

KENTUCKY

Louisville: Citizens Fidelity Bank & Trust Co.; First Kentucky Co.; Liberty National Bank & Trust Co.; PRIMCO Capital Management Inc.; Stock Yards Bank & Trust Co.; Todd Investment Advisors Inc.; Robert M. Walker & Associates Inc.

LOUISIANA

Lake Charles: Calcasieu Marine National Bank
Metairie: Jones, Mathers, Casamento & Co.
New Orleans: Fenner & Williams; Hibernia National Bank

MARYLAND

Baltimore: Adams Express Co.; Alex. Brown Investment Management; Alex. Brown Realty Advisors; Corbyn Associates Inc.; Equitable Bank; First Maryland Asset Management; Investment Counselors of Maryland Inc.; Johnson, Valliant & Broadfoot Inc.; Legg Mason Capital Management Inc.; Maryland National Bank; Mercantile-Safe Deposit & Trust Co.; Petroleum & Resources Corp.; T. Rowe Price Associates Inc.; Rowe Price-Fleming International Inc.; Rothschild Co.
Bethesda: AEI/American & European Investment; Growth Stock Outlook Inc.; Torray Clark & Co.
Silver Spring: AFC Advisory Services Inc.

MASSACHUSETTS

Boston: Aldrich, Eastman & Waltch Inc.; Anchor Capital Advisors Inc.; David L. Babson & Co. Inc.; Baring International Investment Ltd.; Batterymarch Financial Management; Boston Co. Inc.; Boston Financial Real Estate Advisors; Bounty Management Corp.; Breau Capital Management Inc.; Capitol Bank & Trust Co.; Copley Real Estate Advisors Inc.; Dewey Square Investors; Eaton Vance Management Inc.; Endowment Management & Research Corp.; Essex Investment Management Co.; Fidelity International Investment Advisors; Fidelity Investments; Fidelity Management Trust Co.; Franklin Portfolio Associates Inc.; Frontier Capital Management Co.; Gardner and Preston Moss Inc.; Grantham, Mayo, Van Otterloo & Co.; Hagler, Mastrovita, & Hewitt Inc.; John Hancock Financial Services Inc.; Harbor Capital Management Co. Inc.; Hellman, Jordan Management Co. Inc.; Loomis, Sayles & Co. Inc.; Marsh & Cunningham Inc.; Massachusetts Financial Services Co.; MassCo Investment Management Corp.; Mt. Auburn Management; New England Mutual Life Insurance Co.; Peckham Boston Co.; Pell, Rudman & Co.; Pioneering Management Corp.; Property Capital Associates; Putnam Advisory Co.; Rampart Investment Management Co. Inc.; Shawmut Banks; Standish, Ayer & Wood Inc.; State Street Bank & Trust Co.; State Street Research & Management Co.; Trinity Investment Management Corp.; United States Trust Co.; Venture Capital Fund of New England; Wellington/Thorndike, Doran; Winchester Capital Management Co.
Cambridge: Merganser Capital Management Corp.
Carlisle: PSM Investors Inc.
Marblehead: ValueQuest Ltd.
Springfield: Massachusetts Mutual Life Insurance
Waltham: GIMI
Wellesley: Fiske Capital Management
Worcester: State Mutual Life Assurance Co. of America

MICHIGAN

Birmingham: Investors Management Services Inc.
Bloomfield Hills: Acquest Capital Management Inc.; Michigan National Investment Corp.
Detroit: Comerica Bank-Detroit; Manufacturers National Bank of Detroit; National Bank of Detroit; Wilson, Kemp & Associates Inc.
Grand Rapids: Ambs Investment Counsel Inc.; Burnham & Co.; Old Kent Bank & Trust Co.
Kalamazoo: First of America Investment Management
Orchard Lake: Fiduciary & Corporate Counsel
Southfield: RAC Advisors Inc.

MINNESOTA

Minneapolis: C.H. Brown Inc.; First Asset Management; IDS Equity/Fixed-Income Advisors; IDS Growth Spectrum Advisors Inc.; IDS International Inc.; Investment Advisers Inc.; Jundt/Capen Associates Inc.; Morison Asset Management Inc.; Northwest Capital Management; Northwestern National Life Insurance Co.; Sit Investment Associates Inc.
St. Paul: First Trust Co. Inc.; MIMLIC Asset Management Co.
Wayzata: Perkins Capital Management Inc.

MISSOURI

Kansas City: Boatmen's First National Bank of Kansas City; Commerce Bank of Kansas City; Investors Research Corp.; United Missouri Investment Counsel Service; Waddell & Reed Asset Management Co.
St. Louis: Boatmen's National Bank; Centerre Trust Co. of St. Louis; Commerce Bank of St. Louis; General American Life Insurance Co.; Kennedy Capital Management; Lindner Management Corp.; Mercantile Trust Co.; Trendstat Capital Management Inc.

MONTANA

Great Falls: Financial Aims Corp.

NEBRASKA

Lincoln: Commerce Investment Management Inc.
Omaha: First National Bank of Omaha; Kirkpatrick, Pettis, Smith, Polian Inc.; United of Omaha Life Insurance Co.

NEVADA

Las Vegas: First Interstate Investment Advisers

NEW HAMPSHIRE

Manchester: BankEast Trust Co.

NEW JERSEY

Chatham: Ivory & Sime International; Jamison, Eaton & Wood
Edison: Midlantic National Bank
Fort Lee: Greenwich Monitrend Corp.; Pilgrim Management Corp.; Systematic Financial Management Inc.
Hackensack: Townsend Asset Management Co.
Island Heights: Punderson & Co.
Jersey City: W.H. Reaves & Co.
Livingston: Kurtz Capital Management
Morristown: First Quadrant Corp.
Newark: First Fidelity Bank; Matrix Capital Management; Mutual Benefit Life; PCM International; Prudential Asset Management Group
Paramus: Donald Smith & Co. Inc.; Trident Investment Management Inc.
Piscataway: Home Life Insurance Co.
Princeton: Delafield, Harvey, Tabell Inc.; Merrill Lynch Asset Management Inc.; Princeton Asset Management Co.
Ridgewood: Degnan & Gillespie Fixed Income Management Inc.
Saddle Brook: Lexington Management Corp.
Teaneck: Trascott, Alyson, Craig Inc.
Vineland: Cumberland Advisors Pty.
Westfield: Lipper Analytical Services Inc.

NEW MEXICO

Albuquerque: New Mexico Capital Management

NEW YORK

Buffalo: Robshaw & Cheskin Associates Inc.
Garden City: William J. Kautz Associates Inc.
Great Neck: Lieberman Cos.
Hamilton: Schupf, Woltman & Co.
Harrison: Lieber & Co.
Lake Success: Unity Management Inc.
Melville: F.A. Spina & Co. Inc.
New York: Abel/Noser Corp.; ACP Advisers Inc.; Aegis Capital Management Corp.; Fred Alger Management Inc.; Alliance Capital Management Corp.; Amalgamated Bank of New York; American Capital Management Inc.; American Express Asset Management; American Fund Advisors Inc.; Amev Asset Management; Amivest Capital Management; Applied Portfolio Disciplines Inc.; Armour, Douglas Capital Management Inc.; Argus Investors Counsel Inc.; Ashland Management; Atalanta/Sosnoff Capital Corp.; Avatar Associates; Julius Baer Investment Management Inc.; Balch, Hardy & Scheinman Inc.; Bank of New York; Bank of Tokyo Trust Co.; Bankers Trust-Investment Management Group; BEA Associates Inc.; Bear Stearns Asset Management; Sanford C. Bernstein & Co.; Bernstein-Macaulay Inc.; Bessemer Trust Co.; Arnhold & S. Bleichroeder International; BMI Capital Corp.; Bostian Research Associates Inc.; Stacey Braun Associates Inc.; Brignoli, Curley & Roberts Associates; John W. Bristol & Co.; Brown Brothers Harriman & Co.; Brundage, Story and Rose; Campbell Advisors Inc.; Capital Management International GmbH; Carret & Co. Inc.; Chase Investors Management Corp.; Citicorp Investment Management Inc.; Cole, Yeager & Wood Inc.; Columbus Circle Investors Inc.; Computime Institutional Services Inc.; Corporate Property Investors; Cowen Asset Management; Davis/Dinsmore Management Co.; Daiwa International Capital Management Corp.; Delafield Asset Management Inc.; Dietche & Field Advisers Inc.; Dillon, Read Capital Inc.; Discount Corp. of New York Advisors; Douglas, Noyes & Co.; Dreman & Embry Inc.; Dreyfus Management Inc.; Eastdil Realty Inc.; Richard Ellis Inc.; Equitable Capital Management Corp.; Equitable Investment Management Corp.; Equitable Real Estate Investment Management Inc.; Estabrook Capital Management; Favia Hill & Associates; Fiduciary Counsel Inc.; Fiduciary Trust Co.; First Boston Asset Management Corp.; First Investors Equity Management Co.; First Manhattan Capital Management; Fischer, Francis, Trees & Watts Inc.; Foreign & Colonial Asset Management; Forstmann-Leff Associates; Furgueson Capital Management Inc.; Furman Selz Capital Management; GAMCO Investors Inc.; Garrison, Keogh & Co. Inc.; General American Investors Co.; Glickenhaus & Co.; David J. Greene and Co.; Greenspan O'Neil Associates; Haven Capital Management Inc.; Hutton Capital Management; Integrated Asset Management Corp.; Irving Trust Co.; Jennison Associates Capital Corp.; Jones Lang Wootton Realty Advisors; Kahn Brothers & Co. Inc.; Kangyo Kakumaru Capital Management; Kleinwort Benson International Investment Ltd.; KR Capital Advisors Inc.; Landauer Advisors Inc.; C.J. Lawrence Management; W.R. Lazard & Co. Inc.; Lazard Freres Asset Management; Lehman Management Co. Inc.; Liberty Capital Management; Lord Abbett & Co.; MacKay-Shields Financial Corp.; Magten Asset Management Corp.; Manufacturers Hanover Investment Corp.; Marinvest Inc.; Markston International Inc.; McCowan Associates Inc.; Mellon Real Estate Investment Management Corp.; Metropolitan Life Insurance Co.; Milbank Tanaka & Associates Inc.; Mitchell Hutchins Asset Management; J.P. Morgan Investment Inc.; Morgan Stanley Asset Management; MPT Associates; Mutual of America Life Insurance Co.; Neuberger & Berman; New Japan Capital Management; New York Life Insurance Co.; Nikko & Associates; Nomura Capital Management Inc.; NSR Asset Management Corp.; Oakwood Counselors Inc.; J.W. O'Connor & Co. Inc.; Oppenheimer Capital Corp.; Parmelee Management Corp.; M. Pescatello & Co.; Portfolio Group; Prudential Bache Investment Advisory Service; Quest Advisory Corp.; Reich & Tang Inc.; Republic National Bank of New York; Research Associates Management Corp.; Retirement System for Savings Institutions; Roanoke Asset Management; Rothschild Asset Management Inc.; RPI Institutional Services Inc.; Safian Investment Research Inc.; M.D.

Location . . .

Sass Investors Services Inc.; Saybrook Capital; SBC Portfolio Management International Inc.; Schafer Capital Management; A.R. Schmeidler & Co.; Schroder Capital Management International; Schroder Real Estate Associates; Scudder, Stevens & Clark; Security Capital Real Estate Corp.; J&W Seligman & Co. Inc.; Shearson Asset Management Inc.; Simms Capital Management; Smith Affiliated Capital Corp.; Smith Barney, Harris Upham & Co. Inc.; Solomon Asset Management; Somerset Asset Management; Starwood Corp.; Stuyvesant Capital Management Corp.; Sullivan, Morrissey & Mickle; Swiss American Asset Management International; Tallasi Management Co.; Technological Investors Management Corp.; Tel Advisors Inc.; Trevor Stewart Burton & Jacobson Inc.; United States Trust Co. of New York; Value Line Asset Management; Van Eck Investments; Verus Capital; Warburg, Pincus Counsellors Inc.; Ward & Wissner Capital Management; Wardley Marine International Investment Management; Webster Management Corp.; Weiss, Peck & Greer; Wertheim Asset Management Services Inc.; Wertheim-Philippe International; Westwood Management Corp.; William D. Witter Inc.; Wood, Struthers & Winthrop Management Corp.; Yamaichi Capital Management Inc.

Purchase: MONY Financial Services

Rochester: Manning & Napier Advisors Inc.; Norstar Investment Advisory Services; QCI

Tarrytown: E.W. Axe & Co. Inc.

White Plains: Cramer, Rosenthal, McGlynn Inc.; Shields Asset Management

NORTH CAROLINA

Asheville: G. Waring Boys Co. Inc.

Charlotte: Capital Technology Inc.; First Union/Capital Management Group; Interstate Asset Management Inc.; NCNB National Bank; Portfolio Capital Management Inc.; Sterling Capital Management; WEDGE Capital Management Inc.

Greensboro: McMillion/Eubanks Capital Management Inc.

Raleigh: O'Herron & Co. Inc.

Winston-Salem: Wachovia Bank & Trust Co.

OHIO

Alpha: James Investment Research Inc.

Canton: Beese, Fulmer & Pincoe Inc.

Cincinnati: Bartlett & Co.; C-S Capital Advisors Inc.; Fifth Third Bank; First National Bank of Cincinnati; Gateway Investment Advisers Inc.; Gradison & Co. Inc.; Johnson Investment Counsel Inc.; Midwest Group/Robert H. Leshner & Co. Inc.; Renaissance Investment Management Inc.; Union Central Life Insurance Co.

Cleveland: AFA Financial; American Asset Management; AmeriTrust Co.; Huntington National Bank; National City Bank of Cleveland; Roulston & Co. Inc.; Society National Bank

Columbus: Nationwide Insurance Cos.; Ohio Co.

Dayton: DeJarnette Investment Advisors; Parker Dillon Carlson & Johnson

Toledo: Seagate Capital Management

OKLAHOMA

Oklahoma City: First Investment Management; Tom Johnson Investment Management Inc.

Tulsa: Bank of Oklahoma, Tulsa; Capital Advisors Inc.; Investment Management Inc.

OREGON

Lake Oswego: Morley Capital Management Inc.

Medford: Cutler & Co.

Portland: P.E. Becker Inc.; Campbell Group Inc.; Capital Trust Co.; Columbia Management Co.; Crabbe-Huson Co.; Ferguson & Wellman Inc.; First Interstate Bank of Oregon; Oregon Bank; Qualivest Capital Management Inc.; Shaw Management Co.; Thompson/Rubinstein Investment Management; Union Mutual Life Insurance Co.

PENNSYLVANIA

Allentown: Platner & Associates

Bala-Cynwyd: Miller Anderson & Sherrerd

Jenkintown: D.J. Investment Advisors Inc.

King of Prussia: Geewax, Terker & Co.

Philadelphia: Addison Capital Management; Aronson & Fogler; CM&M Asset Management Co.; Cooke & Bieler Inc.; CoreStates Investment Advisers; Dearden, Maguire & Weaver Inc.; Delaware Investment Advisers; Drexel Burnham Lambert Investment Advisors; Fidelity Bank; First Pennsylvania Bank; Glenmede Trust Co.; L&B Real Estate Advisors; Minton/Newbold's Capital Management; Newbold's Asset Management; Penn Mutual Life Insurance Co.; Philadelphia Investment Management Group; Provident Capital Management; Simpson Capital Management Co.; Wolf, Webb, Burk & Campbell Inc.

Pittsburgh: Federated Investment Counseling Inc.; Knowles & Hazlett Ltd.; C.S. McKee & Co. Inc.; Mellon Bank; Pittsburgh National Bank

Reading: Connors Investor Services Inc.; McBryan, Malone & Russell Inc.

Valley Forge: Vanguard Group of Investment Cos.

Wayne: Cashman, Farrell & Associates; John M. Cunningham Inc.; Pilgrim, Baxter, Hoyt & Greig

Wexford: Muhlenkamp and Co. Inc.

Williamsport: NC Capital Management Group

Wyomissing: McGlinn Capital Management Inc.

Yardley: Evans & Moxon Capital Management Inc.

RHODE ISLAND

Providence: HT Investors Inc.; Narragansett Capital Corp.; Old Stone Trust Co.; Providence Group Investment Advisory Co.

SOUTH CAROLINA

Columbia: SCNC Advisory Corp.

TENNESSEE

Brentwood: Weaver C. Barksdale & Associates

Chattanooga: Provident National Assurance Co.

Memphis: First Tennessee Investment Management; Southeastern Asset Management Inc.; Union Planters National Bank; Maury Wade & Co.

Nashville: JCB Asset Management; Lingo Capital Management; Third National Bank

TEXAS

Dallas: Barrow, Hanley, Mewhinney & Strauss Inc.; First City Bank of Dallas; Great American Reserve Insurance Co.; InterFirst Investment Management Inc.; Lehndorff & Babson Real Estate Counsel; Lomas & Nettleton Co.; John McStay Investment Counsel; MRealty; MSecurities Corp.; RepublicBank, Dallas; Western Reserve Capital Management Inc.

Fort Worth: Luther King Capital Management; Texas American Investment Management Inc.

Galveston: Kempner Capital Management Inc.

Houston: Daniel Breen & Co.; Criterion Investment Management Co.; Cullen Center Bank & Trust; First City National Bank of Houston; Gulf Investment Management Inc.; Hoisington Investment Management Co.; Investment Advisors Inc.; Jenswold, King & Associates; L.J. Melody & Co.; Pension Management Co.; Fayez Sarofim & Co.; Tenneco Asset Management Co.; Texas Commerce Bank; Vaughan, Nelson, Scarborough & McConnell Inc.

UTAH

Alta: Albion Management Group

Park City: Fields Investment Group

Salt Lake City : First Security Investment Management; Security Funding Corp.; Smoot, Miller, Cheney & Co.; Wagstaff, Lodefink & Associates; Wasatch Advisors Inc.

VERMONT

Burlington: Chittenden Bank Trust & Investment Division; Fraser Management Associates Inc.

VIRGINIA

Alexandria: Crown Life Insurance-U.S. Pensions

Charlottesville: Chase Investment Counsel Corp.; John Stewart Darrell & Co.

Norfolk: Virginia Investment Counselors Inc.

Richmond: Capitoline Investment Services Inc.; Davenport Asset Management; James River Capital Management Inc.; Lowe, Brockenbrough, Tierney & Tattersall; Sovran Bank; Sovran Capital Management Corp.; Thompson, Siegel & Walmsley Inc.; Wheat Investment Advisors Inc.

Roanoke: Dixon & Hubard Inc.

Virginia Beach: Delta Financial Inc.

WASHINGTON

Bellevue: Ariston Capital Management Corp.

Seattle: Composite Research & Management; KAS Investment Consultants; Kennedy Associates Inc.; Paul A. Merriman & Associates; Rainier National Bank; SAFECO Asset Management Co.; Seafirst Bank; Seattle Trust; Sirach/Flinn, Elvins Capital Management

Spokane: Wakley & Roberton Inc.

Tacoma: Portfolio Timing Inc.; Puget Sound National Bank; Frank Russell Trust Co.

WISCONSIN

Brookfield: Dana Investment Advisors Inc.

Madison: First Wisconsin National Bank of Madison; FMI Capital Management Inc.

Milwaukee: Campbell, Newman, Pottinger & Associates; CIMG Inc.; First Wisconsin Trust Co.; Marine Trust Co.; National Investment Services of America; Northwestern Mutual Life Insurance Co.; Ronald Sadoff Associates; Simmons Financial Management Inc.; Strong/Corneliuson Capital Management

FOREIGN

BAHAMAS

Nassau: Templeton International

BELGIUM

Brussels: BBL Capital Management Corp.

ENGLAND

London: BA Investment Management International Ltd.; Britannia International Asset Management Ltd.; C.B. International Investments Ltd.; Credit Suisse First Boston Ltd.; Lombard Odier International Portfolio Management; Mellon-Pictet International Management; Morgan Grenfell Investment Services; Rothschild International Asset Management; Touche Remnant Pension Fund Management Ltd.; Warburg Investment Management International Ltd.

SCOTLAND

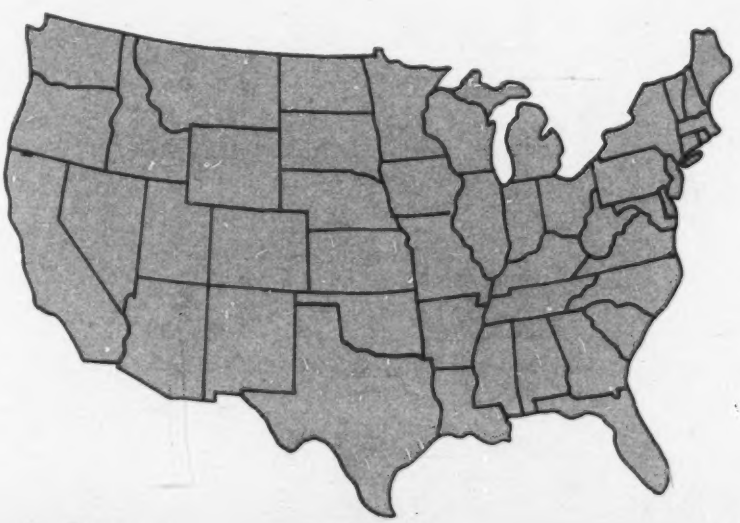
Edinburgh: Baillie Gifford Overseas Ltd.; Martin Currie Ltd. & Subsidiaries; Walter Scott International Ltd.

SPAIN

Madrid: Agepasa

WEST GERMANY

Munich: PM Portfolio Management GmbH



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Pensions & Investment Age

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Inside:

MIDDLE-MARKET PENSION FUNDS are breaking into untraditional investments, such as this union-built and financed commercial property in Santa Fe, N.M. A look at this and other developments — page 13.

AT CATERPILLAR Tractor Co., increased sales, not new equity and debt issues, will be the engine that drives company growth. More corporate finance trends — page 25.

Photo by Mike Marrella

NALCO CHEMICAL visits the public debt markets for the first time for $50 million in commercial paper. Details in the cash management section — page 19.

THE CALIFORNIA Public Employees' Retirement System is heading East with some of its real estate equity money, purchasing this building in Raleigh, N.C., among others — page 8.

BROKERAGE FIRMS serving small pension fund clients could be fiduciaries under ERISA if they suggest stock transactions, a federal judge says — page 3.

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Easier recapture eyed

Panel suggests taking surplus without terminating

By Richard J. Gillespie

WASHINGTON — Corporations should be able to recoup surplus pension assets without having to terminate their pension plans, under certain restraints, a task force commissioned by the ERISA Advisory Council recommends.

The recommendations, which will be presented to the council June 2, are intended to combat the increasing frequency of terminations, but will not allow "unlimited access" to surplus assets, said T. Timothy Ryan Jr., task force chairman.

Participants' benefits would be protected by applying such safeguards as using the Pension Benefit Guaranty Corp.'s interest rate to calculate liabilities, limiting the surplus that can be recaptured to assets exceeding 120% of plan liabilities and restricting the frequency of the withdrawals.

However, withdrawing assets still might be easier than terminating a plan because of lack of administrative costs, and no requirements to vest all accrued liabilities and purchase annuities for those benefits.

The task force also recommended imposing a 20% surcharge on plan assets recovered through a termination, while proposing that a smaller charge, or none, be placed on withdrawals.

Now, an employer can gain access to the surplus assets of a defined benefit plan only as a result of plan termination. With most large plans heavily overfunded on a termination basis, the pace of terminations has caused considerable consternation in the pension industry, Congress and the general public. Generally, the task force's report found the current system of termination withdrawals to be inefficient.

"The inefficiency arises as a result of the often substantial transactional costs incurred in terminating a plan," according to the report.

"Where the objective of the termination is to gain access to surplus assets, a strong economic argument can be made for a system which avoids terminations and allows the monies used to defray such costs to remain in the plan.

"More important is the potential harm to participants and beneficiaries as a result of termination/reversion under the present system."

In the 78-page report released last week, the termination task force, commissioned by the ERISA Advisory Council last December, made three broad recommendations.

In addition to urging establishment of a system of direct access to surplus assets without plan termination, it proposed modification of the asset reversion guidelines established by the Reagan administration in 1984, including requiring the past-service credit be given in successor plans.

Under the guidelines, a corporation is allowed to do spinoff/terminations and termination/re-establishments, as long as it meets certain requirements, such as vesting all accrued benefits and purchasing annuities to cover those obligations.

Basically, those methods allow an employer to maintain a successor defined benefit plan after its original plan is terminated.

The task force also recommended requiring employers to give participants advance notification of plan terminations, along with an explanation of the economic impact of the transaction.

In its deliberations, Mr. Ryan said the task force had come up with a five-point program for establishing withdrawals from ongoing plans.

• To determine the surplus available, he said, plan

Continued on page 41

ESOP sues Odgen over shares' value

By Barry B. Burr

BOSTON — The employee stock ownership plan of Avondale Industries Inc. — the largest firm owned in majority by an ESOP — is suing Ogden Corp., its auditor and financial advisers, claiming it was "fraudulently induced" to pay some $100 million in excess of market value for the assets the employee trust bought.

In an interview, Donald A. Krenz, Ogden executive vice president, acknowledged, "There is a reasonable dispute there" about the value of the assets. But he said other charges in the suit are unwarranted.

As part of a corporate restructuring last year to divest about half of its assets, Ogden created Avondale out of eight operating units and set up the ESOP to buy the new firm.

The suit claims Ogden executives controlled the transaction's valuation, placing it at $365 million.

Avondale and the ESOP trustees filed the civil suit in U.S. District Court in Boston. They are suing Ogden, its Ogden American Corp. unit, Deloitte Haskins & Sells and Bankers Trust Co., all of New York, and Interstate Securities Corp., Charlotte, N.C., citing violations of the Employee Retirement Income Security Act, the Securities Exchange Act and the Racketeer Influence and Corrupt Organizations Act.

The plaintiffs, represented by the Boston law firm of Hale and Dorr, are demanding a jury trial.

The suit seeks from the defendants "at least $100 million," the amount Ogden purportedly overcharged for Avondale, under eight of the 18 counts. It also seeks $300 million under the alleged RICO violations, and unspecified punitive damages, as well as legal expenses.

The 46-page suit is filled with acrimonious language, what Mr. Krenz dismissed as "lawyers' language."

He said Ogden expects to file its reply to the suit in June.

Other defendants and Avondale executives were unavailable for comment.

Mr. Krenz said Ogden executives suspected Avondale would file suit after negotiations with Avondale executives failed to resolve the dispute over the value.

"There was a fairly significant difference," he said.

For the Avondale units, Ogden received $83 million in Avondale preferred stock and $282 million in cash, including $92 million in excess assets from the Avondale

Continued on page 41

Eastern pricetag may rise

By Rose Darby

WILMINGTON, Del. — A Machinists union stock trust lawsuit filed here against Eastern Air Lines Inc. paves the way for later litigation that could boost the cost of the airline's acquisition by Texas International Airlines Inc. by more than $350 million, to nearly $1 billion.

On the surface, the lawsuit is intended to force Miami-based Eastern to pay a $500,000 fee for independent financial and legal advice on whether the proposed acquisition would give a fair shake to shareholders in the Machinists' trust.

However, the suit hints further litigation on the value of the assets will be forthcoming. Under the terms of Houston-based Texas International's tender offer, the Machinists' shares — which constitute 30% of stock held by four trusts for Eastern employees — would be worth roughly $45 million, the fund's complaint said.

But the shares might be valued "as high as $150 million or

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TI, GM and Dallas Symphony sign up

3 adopt dynamic hedging

By Trudy Ring
and Chuck Paustian

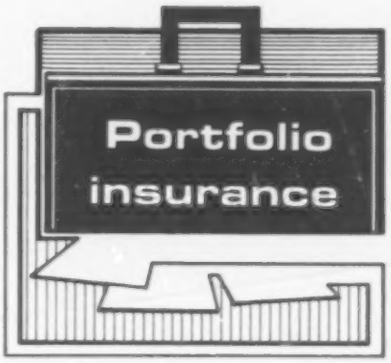
Texas Instruments Inc., Dallas, and the Dallas Symphony Foundation have adopted dynamic hedging, while General Motors Corp. reportedly has leased dynamic hedging software for use internally.

The $700 million Texas Instruments pension fund and the $11 million Dallas Symphony Foundation both hired RepublicBank Dallas for dynamic hedging, commonly called portfolio insurance, officials of those funds said.

General Motors, with $26.3 billion in employee benefit assets, reportedly has leased the dynamic risk hedging software package developed by Leland O'Brien Rubinstein Associates Inc., Los Angeles, for use by the internal pension staff.

Dynamic hedging is a strategy in which stock index or fixed-income futures are sold against an investment portfolio to offset declines in the value of the portfolio. The hedging position is added without affecting the pension fund's investment managers.

The aim is to lock in a minimum rate of return in down periods while allowing the capture of some upside gains. It does so without market forecasts, but in reaction to market moves.



Texas Instruments and the Dallas Symphony Foundation will apply dynamic hedging only to their equity exposure, which is about 75% for each fund, and both aim for no loss in those portfolios during a two-year period.

It could not be determined which of General Motors' employee benefit plans, or the amount, were to be placed under the hedging technique. In addition, it was not clear whether the hedging technique would be used for General Motors' internally managed portfolio, the external investment managers, or both.

The two Dallas funds are RepublicBank's first dynamic hedging clients. The bank is using technology supplied by Skye Investment Advisors Inc., Cupertino, Calif. The principals of Skye have connections with Stanford University, Palo Alto, Calif., and experience at high-technology industries in California, said John Meneghetti, a vice president and trust officer at RepublicBank.

The bank also looked at technology offered by Wilshire Associates, Santa Monica, Calif., and Leland O'Brien Rubinstein, Mr. Meneghetti said.

Bank officials believe Skye will provide the best technical

Continued on page 42

Restructuring plans

NY City implements; RI considers

By Ed Christman
and Brad Rudin

The New York City Retirement System has begun implementing a major restructuring while the Rhode Island Employees Retirement System, Providence, is seeking a consultant to determine if restructuring is needed.

The office of Comptroller Harrison J. Goldin, which oversees the approximately $24 billion city fund, has requested proposals from fixed-income advisers on managing portfolios under the long-awaited new structure, which eventually also will affect equities.

Officials in Rhode Island are seeking a consultant to evaluate and recommend changes, if necessary, for the internally managed $1.3 billion system. About $1.2 billion are state assets; the remainder are from municipalities without separate pension plans.

The New York City restructuring will divide the fixed-income portfolio into four sectors: government, corporate, mortgage-backed securities and foreign.

The primary objective is to allow the fund to have tight control over the aggregate fixed-income portfolio, the proposal said. Fund officials expect to begin allocations to the new managers July 1.

Third Deputy Comptroller Marvin Damsma, who has been overseeing the restructuring, said the new strategy is not indexing, although there are few active decisions for a manager to make.

Decisions remaining include how many securities to hold to replicate the sector being worked; how investment income and maturing holdings are reinvested; whether to swap like bonds for yield gains; and how to work within a range of control parameters.

The government sector will comprise 61% of the fund's fixed-income portfolio. The benchmark characteristics are 85% treasury issues and 15% federal agency issues with a duration of 4.59 years.

The fund has instituted minimum and maximum control parameters for each aspect of the sector. For example, the minimum range of the duration is plus or minus 0.15; and the maximum

Continued on page 40

Wells Fargo Bank puts Crocker unit up for sale

By Steve Hemmerick

SAN FRANCISCO — Executives at Wells Fargo Bank are trying to quickly sell Crocker Investment Management Corp., the investment subsidiary of the bank holding company acquired by Wells.

Without a relatively quick sale of Crocker Investment Management, first offered in April, there is fear that part of its staff will depart for other jobs, or that some of its 14 clients, who have given the firm $1.4 billion in assets to manage, will leave.

"Time is of the essence," said Paul Hendricks, senior vice president for trust investments with Wells Fargo Bank. Wells Fargo & Co., the parent of the bank, acquired Crocker National Corp., San Francisco, a bank holding company, in a $1.7 billion deal announced in February.

The asking price for Crocker Investment is two times revenue. According to sources, the asking price is between $3 million and $3.75 million. A source at Wells Fargo said that estimation is not out of line, but the final figure is up to negotiation.

Although he didn't know the asking price, Richard K. Kingsley, chairman and chief executive officer for Kingsley, Jennison, McNulty & Morse, San Francisco, said an asking price of two times revenue "sounds right on the mark" for a going concern.

The "historical" number for such a sale, said Mr. Kingsley, is between one and three times earnings.

It appears Crocker Investment has lost a number of major clients during the past few years, including American Telephone & Telegraph Co., New York; Boeing Co., Seattle; Chevron Inc., San Francisco; and Weyerhaeuser Co., Tacoma, Wash.

A source at Wells Fargo said Crocker had lost some major accounts in the prior two years, although he did not know the names or reasons.

A key officer at Crocker Investment, who asked that his name not be used, said the firm's major business loss was a $500 million account with AT&T, and Crocker Bank's $400 million short-term

Continued on page 40

Kennard Woodworth Jr., Crocker Investment CIO: Sale could determine his future

4 pension fund execs join money management firms

By Brad Rudin

Four corporate pension executives have left their companies for positions with money management firms.

Their departures leave more footprints on the familiar path from the "buy side" of the industry to the "sell side."

- Richard T. Tyner, formerly vice president of investments and investor relations at J.P. Stevens & Co. Inc., New York, has become senior vice president for fixed-income investments at Century Capital Associates in New York, sources at both companies acknowledged. The Stevens retirement plan has $400 million in total assets, according to John J. Zerrenner, vice president and controller.
- Richard P. McGahan, who was manager of pension asset management at the Monsanto Co., St. Louis, joined Fred Alger Management Inc. as vice president of client service. Monsanto, which has $2.5 billion in pension assets, has not yet named a replacement for Mr. McGahan, according to Alwyn E. Wolfarth, assistant treasurer at Monsanto.

Mr. McGahan will open an office for New York-based Alger in St. Louis, said Krista M. Woodall, Alger's senior vice president and director of client service.

- Bruce C. Anderson, formerly assistant treasurer and manager of financial services for Getty Oil Co., Los Angeles, is joining Alger as a vice president for client service in charge of the firm's soon-to-be opened Los Angeles office. Getty was acquired by Texaco Inc. in 1984.

Texaco since has merged the $700 million Getty fund with its roughly $2 billion fund. The company does not intend to replace Mr. Anderson.

Ms. Woodall said the appointment of Messrs. McGahan and Anderson demonstrates Fred Alger's commitment to increasing its business in the West. "We feel we have capacity for growth . . . We see this as an expansion of our business."

- Matthew A. Gotwols, formerly the manager of pensions and investments at the New York-based SCM Corp., which in March

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The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* April Indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	–1.1	12.8	36.3
Russell 3000[1]	.63	13.8	36.8
Ryan Index[2]	.66	11.8	23.0
Shearson Lehman Gov't/Corp.[2]	.71	9.6	24.8

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

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Cash Management

Debt-market entry to aid acquisitions

Nalco offering commercial paper

By Chuck Paustian

NAPERVILLE, Ill. — Nalco Chemical Co. will venture into the public debt markets for the first time with a $50 million commercial paper program, a move that should help the company establish its name and a track record in the public markets.

Nalco Chemical, a diversified specialty chemicals company, will use the commercial paper program to further its acquisition activity.

"We want to establish our name in the debt markets in case we want to issue some senior debt," said R.M. Bloom, senior vice president of finance and chief financial officer at Nalco.

An established name and track record in the debt market would facilitate the issuing of long-term debt in the future, according to cash management executives.

Capital raised from the sale of the commercial paper will be used for seasonal operating costs of the company, Mr. Bloom said.

Salomon Brothers Inc., New York, will serve as dealer for the commercial paper program. The commercial paper is backed by bank lines from five of the company's principal banks, with Morgan Guaranty Trust Co. of New York serving as the lead bank.

Nalco Chemical has been a leading provider of chemicals, products and technical services used in water treatment.

A decline in both political and economic pressure in favor of water pollution control and treatment, however, forced the company to diversify into other specialty chemical concerns in order to maintain growth.

During the past 18 months, Nalco Chemical has made five acquisitions involving specialty chemical companies.

These acquisitions included Day-Glo Color Corp. for $41.4 million in cash and the remaining 80% of Adco Products Inc. for $18 million in cash, bringing the total investment in Adco to $21.8 million. Both acquisitions occurred in 1985.

For the most part, the company has been able to finance these acquisitions through its cash reserves, with some capital raised through private placements. The company's cash, though, has been drastically reduced as a result of the purchases.

As of Dec. 31, the company's cash and short-term investments totaled about $7.5 million, down from about $41 million at the end of 1984 and about $71.6 million at the end of 1983.

Mr. Bloom said although the company is not now planning more acquisitions, additional purchases may have to be financed through the public markets.

"We have been active in the acquisition area. We don't have anything that would require us to issue debt now, but if we have the opportunity we'd like to be able to take advantage of it," he said.

Although low interest rates tend to favor longer-term financing, Mr. Bloom said the company wanted to use the commercial paper program because of its lower cost.

"At some point in time, you have to start," he said, adding company executives felt it was best to start with short-term instruments rather than 30-year senior debt.

W. Bruce Jones, assistant vice president and a chemical company analyst with Moody's Investors Service, New York, said the commercial paper program would not have a negative effect on the company's financial status.

"The company has no particular need to borrow money at this point. They have ample bank credit. The company is in excellent financial condition," said Mr. Jones.

At the end of 1985, Nalco had $23.5 million in long-term bank debt and private placements and $21 million in short-term bank debt and private notes, compared with $384 million in stockholders' equity.

Moody's rated Nalco Chemical's commercial paper P-1.

Mr. Jones said the use of the commercial paper market to develop a credit rating for the company was a sound strategy, likening it to a person developing a credit history prior to purchasing a house.

Continued on page 20

Cash directory expanded; due date is June 5

Pensions & Investment Age's 1986 Cash Management Directory is being expanded, adding more organizations and types of services.

Any organization providing cash management services in the United States or Canada that hasn't received a questionnaire for the directory may obtain one by contacting Carol Wiley, directory coordinator, at (312) 649-5486. The deadline for submitting questionnaires is June 5.

The directory, which will be published July 21, is the only publication of its kind. It will profile the cash management services of banks, service providers, short-term investment managers, as well as national and regional corporate cash management associations.

In addition, this year the cash management directory will feature profiles on firms offering treasury workstations, cash management microcomputer software and data bases.

Payden & Rygel index of short maturity assets*
(for month ended April 30)

	April 1986	Quarter ended 3/31/86	Year to date	12 months ended 4/30/86	Yield level monthly change*
	Unannualized total returns				
90-day					
U.S. Treasury bill	0.5775	1.9239	2.5125	7.9650	−34
Domestic CD	0.6804	2.0358	2.7402	8.4524	−57
Euro $ CD	0.6956	2.0508	2.7607	8.5198	−58
180-day					
U.S. Treasury bill	0.5962	2.1939	2.8032	8.8153	−13
Domestic CD	0.8184	2.1516	2.9877	9.0036	−57
Euro $ CD	0.8407	2.1554	3.0143	9.2272	−80
1-year					
U.S. Treasury note	0.7100	2.6482	3.3770	10.4243	−18
2-year					
U.S. Treasury note	0.7279	3.8573	4.6133	14.7820	−69

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. 90- and 180-day Treasury bill yield level changes on discount basis.
*Basis points.
Source: Payden & Rygel, Los Angeles

The Payden & Rygel index of short maturity assets is a regular feature of the cash management section. It represents total returns on money market instruments, rather than simple yields. It is intended to provide a benchmark for judging performance on short-term assets.

Subcommittee report blasted

Bell calls criticism of his Hutton probe 'nitpicking'

By Barry B. Burr

ATLANTA — Griffin Bell is calling a House Judiciary subcommittee report assailing the scope and conclusions of his investigation into E.F. Hutton & Co.'s check overdrafting scheme "wrong" and "nitpicking."

Mr. Bell, former U.S. attorney general and now a partner in the Atlanta law firm of King & Spalding, criticized the subcommittee on crime for not allowing him to answer its complaints about his Hutton probe.

Hutton commissioned Mr. Bell to conduct his investigation after its chairman pleaded the company guilty last spring to 2,000 charges in connection with the check overdrafting scheme. The report was released in September.

The subcommittee, which has yet to finish its report on the Justice Department investigation of Hutton, never called Mr. Bell to testify.

"I volunteered twice to testify before, but they never called me," Mr. Bell said in an interview. "I never called me."

The House subcommittee issued the report May 7, lambasting the Bell investigation for a lack of thoroughness.

Speaking about the subcommittee report, Mr. Bell said, "I saw it. I read it with great care. I didn't think much of it. I thought it was a nitpicking affair and was wrong."

Mr. Bell said he was baffled why the subcommittee would report on his probe, since the House panel was assigned to look at the Justice Department's handling of the Hutton matter.

Subcommittee officials were unavailable for comment.

"If they would want to know anything about the Hutton investigation," Mr. Bell said of the subcommittee, "I know more about it than anyone in America.

"If they want to have a hearing on it, I'll be glad to appear at anytime, just as I did last week before the Senate (panel)."

Among its complaints, the subcommittee's 14-page critique claimed Mr. Bell's report lacks

sions.

Rep. William J. Hughes, D-N.J., the chairman of the subcommittee, said in a statement that the Bell report was an effort by Hutton at damage control and fell short of being objective, because the securities firm paid for the investigation.

But Mr. Bell said, "It's not a question of conflict of interests, but of integrity.

"How would Hutton get a report, if it didn't hire someone?"

In particular, the subcommittee noted the Bell report said the harm to the banks from the check kiting scheme was exaggerated and most of Hutton's banks were satisfied customers.

The subcommittee said Mr. Bell based his claim on the small number of banks that applied for restitution by the deadline.

"He includes within this category of 'satisfied' banks those that discovered the overdrafting and that demanded compensation," the subcommittee reports states. "Obviously our investigation shows that most of these banks

Foreign currency uses vary widely

By Barry B. Burr

GREENWICH, Conn. — More than 25% of corporate treasury managers buy spot foreign currency to translate current payables or receivables, while 10% trade foreign currency for profit as part of their hedging and exposure management.

The findings are part of a survey of foreign exchange practices of U.S. corporations conducted by Greenwich Associates.

The survey found the use of foreign exchange tools varies widely. Only one in 10 U.S. corporations use interest rate swaps and only 16% use currency swaps to help manage their foreign exchange exposure in their business operations. (Chemical firms, for instance, are the largest traders of currency swaps.)

On the other hand, more than 70% of corporations trade forward contracts.

Among other results of the survey of 642 U.S.-based companies, Greenwich found:

- The most important reason for selecting a bank for foreign exchange transactions depends on a company's trading volume. Larger volume traders place more importance on competitive quotes, while smaller volume traders emphasize general service or timely market information and advice or the overall banking relationship.
- The three most important currencies U.S. companies use are, respectively, the pound sterling, Canadian dollar and deutsche mark. The two currencies that have increased the most in use in the past two years are the deutsche mark and yen, while the two currencies that have declined the most in use during the same period are the Swiss and French francs.

trading volume last year in spot transactions, forward contracts, currency swaps and options was $975 million. Among multinationals alone, the average volume was $1.5 billion, while among non-multinational U.S. firms the volume was only $209 million.

- The average firm uses six banks for foreign exchange trading — three U.S. banks, one Canadian bank, one British bank and one continental European bank. Companies with sales in excess of $5 billion use on average 12 banks — six in the United States, one U.S. investment bank, two in Scandinavia or elsewhere in continental Europe, one in Britain, one in Canada, and one in Australia or the Far East.
- In its foreign exchange trading volume, the typical multinational allocated 41% to spot transactions, 45% to forward contracts, 13% to swaps and 1% to options.

The average non-multinational company allocated 83% to spot transactions, 15% to forward contracts, 2% to swaps and nothing to options.

Foreign subsidiaries allocated on average 73% to spot transactions, 19% to forward contracts, 8% to swaps and 1% to options.

Greenwich surveyed 338 multinationals, 135 large non-multinational firms and 170 foreign subsidiaries.

The survey found 27% of the companies buy spot foreign exchange to translate current payables or receivables; 37% buy spot and forward contracts to translate current and anticipated payables, receivables and balance sheet exposures; 10% trade foreign exchange for profit as part of hedging and exposure management; and 3% trade foreign exchange as a profit center in all dimensions of the foreign exchange market.

Real Estate

Connecticut puts money in storage

By Ed Christman

HARTFORD, Conn. — The $4.8 billion State of Connecticut Trust Funds, moving to increase real estate equity holdings to 15% of assets and to diversify into specialized investments, has committed $15 million to the Public Storage Institutional Fund, a closed-end fund started by PSI Institutional Realty Group, Pasadena, Calif.

The fund expects to have 12% of assets in equity real estate by June 30, up from 10.4% last September, said Robert Staley, Connecticut's real estate investment officer.

Connecticut's equity real estate portfolio is valued at about $550 million.

The fund is one of three pension funds that have committed a total of $28 million to the Public Storage Institutional Fund, which started taking commitments in April and will close when commitments reach $60 million.

The other two pension funds were not named.

Connecticut already has $20 million in three other pooled funds offered by Public Storage Inc., the parent of PSI.

"It is still too early to tell how those investments are performing," said Mr. Staley.

But the storage facilities offer "an excellent investment opportunity, both in terms of return and diversification," Mr. Staley said. "Public Storage has a long outstanding track record."

Public Storage, which was founded in 1972, has 547 storage facilities in 32 states with a market value of about $2 billion. Of that, $1.1 billion is owned by institutional tax-exempt clients, with the remainder being owned by taxable clients and Public Storage.

The firm runs 26 funds: Public Storage Properties is a series of 17 funds that develop storage facilities; Public Storage Partners is a series of seven funds that acquires existing facilities. In addition, the firm runs a New York Stock Exchange real estate investment trust called Storage Equities.

The Public Storage Institutional Fund is the first fund offered by the PSI Institutional Realty Group, a unit formed by the parent to set up and market investment programs to institutional investors.

The Institutional Fund, which is similar to the 17 Properties funds, will acquire land and develop about 30 facilities in 15 major metropolitan areas across the United States, said

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Real estate under review

Falling interest rates could prompt new strategies

By Steve Hemmerick

Some pension funds are rethinking their real estate investment strategy because of the sharp drop in interest rates.

With the drop in those rates, quality property has become more scarce and yields on participating mortgages also have dropped off sharply, in some instances to 8¼% from 11%.

"We are reviewing the direction of our entire real estate program right now," said Tom Hassard, investment officer for real estate for the $5.9 billion Virginia Supplemental Retirement System. A formal study on how the market has changed should be ready sometime in June, he said.

"The board has become extremely cautious about buying into equity real estate," said Jake Petrosino, chairman of the $36 billion California Public Employees' Retirement System, another fund taking a look at its strategy. "The deals out there aren't all that great in terms of return."

The Virginia and California funds aren't alone. Quite a few pension funds are re-examining their strategy, according to Paul H. Saylor, a consultant and principal with Pension Real Estate Services, Atlanta.

The approach isn't to stop investing in real estate, an asset class that has become almost traditional, but rather to find ways to increase yields in the current market.

One possible strategy that might come out of the current situation is a shift in emphasis from investing in participating loans to ownership, said Mr. Saylor.

A reason for the possible shift is that participating loans on high-quality properties don't yield today what they did at the beginning of the year. Developers are seeking 10-year, non-equity loans in the 8% to 8.5% range, said Mr. Hassard.

That is of concern because, historically, he said, participating mortgages are 100 to 150 basis points below a comparable term bullet loan. That would mean, he said, a participating mortgage would offer 6.5% to 7%, too low a yield at this point for the Virginia system.

Last fall, Virginia began a direct real estate program with a target of investing $100 million in participating mortgages. It signed four advisers for the program: Equitable Real Estate Investment Management, New York; Eastdil Realty Inc., New York; Heitman Advisory Corp., Chicago; and Alex. Brown Realty Advisors Inc., Baltimore.

Before rates fell, the system made two participating mortgages, both of which Mr. Hassard described as excellent. In the first one, Virginia and Equitable split a $41.5 million participating mortgage loan on a Dallas retail/office complex. The 10-year mortgage pays a 10% coupon plus 50% participation in income and gains.

In the second participating mortgage, arranged by Eastdil Realty, Virginia invested $10.5 million on a 20-story office building in Charlotte, N.C. Terms of the loan were not revealed. (*Pensions & Investment Age*, April 28).

Since then, participating loans have become less attractive, but the option of ownership may not be easy. Here the drop in interest rates has had the effect of making less equity real estate available for ownership, said William L. Ramseyer, president of Pension Realty Advisors, San Francisco.

Developers and owners are less inclined to sell today, he said, because they can get such relatively inexpensive loans and hang onto their property. When interest rates were much higher, they had to give up their properties to cash-rich pension funds to get out from under crushing high loan rates.

Even with the changing environment, Mr. Saylor believes ownership will be the new direction for real estate investment. The pension funds likely to take that route are the ones that already have invested in participating mortgages and already have a core index fund of real estate through investment in commingled funds.

The reason behind the switch to ownership rather than participating mortgages will be a risk factor, said Mr. Saylor. For the same yield, he said, it would be wiser to own a good property than to finance it, especially if the loan, to get a competitive yield, is for more

Continued on page 30

Real Estate Open-end funds

Period ended Dec. 31

1-year returns

	%
Mutual Benefit Life (VCA 5), N.J.	23.4
Copley Real Estate Adv., Mass.	20.0
Phoenix Mutual, Conn.	17.0
Corporate Property (REIT), N.Y.	16.7
Wachovia Bank, N.C.	16.7
Prudential (MORISA), N.J.	16.7
Canada Life Assurance	16.3
NCNB National Bank, N.C.	15.2
Chase Manhattan, N.Y.	14.8
CIGNA Corp., Conn.	14.3
Morgan Guaranty, N.Y.	14.3
Prudential (PRIMOR), N.J.	13.8
Citicorp, N.Y.	13.0
Bank One Trust, Columbus, Ohio	12.4
Aetna Life & Cas. (PMSA), Conn.	12.3
Metropolitan Life, N.Y.	12.2
First of Minneapolis	11.4
Massachusetts Mutual	11.3
Republic National, Dallas	11.2
Wells Fargo Realty Adv., Calif.	11.0
First of Chicago (Fund F)	10.8
United Virginia Bank	10.8
First of Boston	10.5
Goldman, Sachs (INPROP), N.Y.	10.4
Equitable Life, N.Y.	9.7
Travelers, Conn.	9.6
Bankers Life, Iowa	9.6
Aetna Life & Cas. (RESA), Conn.	9.5
Sun Bank, Fla.	9.4
New York Life (Acct. 3), N.Y.	9.2
Prudential (PRISA), N.J.	8.9
Mercantile Trust (Fund R), Mo.	8.6
Third National, Nashville, Tenn.	8.4
Interfirst Bank, Dallas	8.1
Lloyds Bank (Fund F), Calif.	7.1
Metropolitan Life (Tower), N.Y.	6.7
Seafirst Bank, Wash.	6.7
John Hancock, Mass.	6.6
Crocker National (Eq. P), Calif.	5.3
Consumer Price Index	**3.8**
Bank of America, Calif.	1.5

Commingled returns fall

By Steve Hemmerick

Some real estate commingled fund returns fell several percentage points in calendar 1985, partly as a result of the softness in the office market.

Pensions & Investments' Performance Evaluation Report numbers show that among those hit hard were the big three open-end commingled funds:

Aetna Life and Casualty Co., Hartford, Conn., Real Estate Separate Account; Equitable Real Estate Investment Management, Inc., New York, Separate Account 8; and Prudential Asset Management Co. Inc., Newark, N.J., Prudential Real Estate Investment Separate Account.

Together they have hundreds of clients and more than $10 billion in assets.

For calendar 1985, Aetna's RESA account returned 9.5%, compared with a 13.1% return in calendar 1984. Equitable's Separate Account 8 returned 9.7%, compared with 14.1% for 1984. PRISA returned 8.9% in 1985, vs. 14.5% a year earlier.

In comparison, the Consumer Price Index was at 3.8% for the year, down slightly from the 3.9% the year earlier.

Of the 40 open-end funds tracked by PIPER, 37 beat the CPI in 1985. In 1984, 38 open-end funds, all of those tracked that year, beat the CPI.

Observers note it is difficult to compare real estate funds against each other because of different risk profiles, different portfolio emphases and different methods of appraisal.

While real estate managers point out returns still are positive in a difficult real estate market, the high vacancy levels nationwide of office buildings have taken a toll.

Stephen F. LeLaurin, formerly a manager with Aetna's real estate division who now works in its fixed-income area, said of the falling returns, "I think it's a reflection of the real estate market generally, and particularly office buildings."

Alan Emkin, a consultant with Wilshire Associates Inc., Santa Monica, Calif., said, "In almost every major market, rents have dropped by 25% to 30%. You would assume that would be reflected in market values."

Among other open-end funds showing drops for 1985 were NCNB National Bank, Charlotte, N.C., Real Estate Fund, which returned 15.2% for 1985, down from 19% in 1984; Corporate Property Investors, New York, a real estate investment trust, 16.7% vs. 22.4%; Metropolitan Life Insurance Co., New York, Real Estate Fund, 12.2% and 16.3%; and United Virginia Bank, Richmond, Real Estate Investment Fund for Employee Benefit Trusts, 10.8% vs. 12.3%.

Some of the funds showed a much higher return than others because of differing risk profiles and asset mixes.

NCNB's fund, for example, is more involved in development, and Corporate Property Investors' fund is more involved in investing in shopping centers.

Among closed-end funds, 28 of 29 reporting beat the CPI last year; of the 19 reporting in 1984, all beat CPI.

John Hancock Mutual Life Insurance Co., Boston, SERA-1, a closed-end apartment fund, reported a 17.4% return. While that was high among closed-end funds, it still was down from the 21.1% return the fund reported the previous year.

Coldwell Banker Capital Management Services, New York, Institutional Fund V, reported 18.3% in 1985, but 24% the previous year. The Sarofim Trust Co., Houston, SIRF P-I, reported an 11.7% return for 1985, but 22.5% return the previous year.

While there was some depreciation among buildings in the Sarofim fund, explained Joshua M. Brown, vice president for Sarofim, the reasons for the sharp drop in 1985 was that several buildings were sold, and the 11% return is a net cash return.

Also, he said, appreciation in 1984 was especially high because the fund included developmental properties that were first appraised that year.

Although returns for many closed-end funds fell in 1985, others remained stable and still others moved upward.

JMB Institutional Realty Corp., Chicago, Group Trust 1, a closed-end fund, reported a 23.1% return in 1985, up from 20.6% in 1984. The Travelers Insurance Co.,

Continued on page 30

3-year returns

	%
Copley Real Estate Adv., Mass.	24.6
Mutual Benefit Life (VCA 5), N.J.	18.6
Corporate Property (REIT), N.Y.	17.6
NCNB National Bank, N.C.	17.2
Phoenix Mutual, Conn.	17.0
Metropolitan Life, N.Y.	16.7
Prudential (MORISA), N.J.	16.3
Morgan Guaranty, N.Y.	15.9
Aetna Life & Cas. (PMSA), Conn.	15.1
Metropolitan Life (Tower), N.Y.	14.9
First of Minneapolis, Minn.	14.8
Canada Life Assurance	14.8
Prudential (PRIMOR), N.J.	14.7
CIGNA Corp., Conn.	14.5
Equitable Life, N.Y.	14.1
Chase Manhattan, N.Y.	13.0
First of Chicago (Fund F)	12.3
First of Boston	12.2
Interfirst Bank, Dallas	12.1
Wachovia Bank, N.C.	12.0
Citicorp, N.Y.	12.0
United Virginia Bank	12.0
Bank One Trust, Columbus	11.9
Aetna Life & Cas. (RESA), Conn.	11.8
Prudential (PRISA), N.J.	11.5
Sun Bank, Fla.	11.4
Bankers Life, Iowa	11.2
Mercantile Trust (Fund R), Mo.	11.1
Massachusetts Mutual	10.8
John Hancock, Mass.	10.5
Republic National, Dallas	10.3
Wells Fargo Realty Adv., Calif.	9.8
Third National, Nashville	9.3
Crocker National (Eq. P), Calif.	9.1
Travelers, Conn.	8.5
Seafirst Bank, Wash.	7.6
Bank of America, Calif.	7.2
New York Life (Acct. 3), N.Y.	5.7
Consumer Price Index	**3.8**

5-year returns

	%
Morgan Guaranty, N.Y.	16.6
NCNB National Bank, N.C.	16.4
Metropolitan Life, N.Y.	15.2
Wachovia Bank, N.C.	15.0

Commingled . . .

Continued from page 29

Hartford, Conn., Separate Account R equity fund reported a 9.6% return in 1985, up from 6.8% in 1984. And LaSalle Advisors, Inc., Chicago, Street Fund, reported a 15.2% return for 1985, up from 14.5% return in 1984.

Although differing appraisal methods affect fund performance, some consultants said some managers have been striving to have appraisals accurately reflect values.

At Pension Real Estate Services, a consulting firm in Atlanta, Paul Saylor, principal, said, "Nothing is perfect, but at least there is a greater effort on the part of most managers and advisers to be more realistic in not only how they come up with overall yields, but also a declining willingness to take high inflation components of yield that they are going to have to justify at some point in the future."

Real estate managers point out a one-year performance comparison only gives a limited picture of real estate, a long-term investment.

The longer term PIPER figures seem to bear them out.

Among the big three open-end funds, their five-year returns are more than double the CPI figure of 4.8%: Aetna's RESA shows 12.5%; Equitable, 13.5%; and PRISA, 11.3%. For 10 years, with the CPI at 7%, PRISA returned 14.7% and Equitable, 13.1%. No 10-year figure is available for RESA.

Many closed-end funds aren't old enough to have long-term figures, but Coldwell Fund V, JMB Group Trust 1 and LaSalle all topped the CPI, returning 16.8%, 20.1% and 16.5%, respectively. ■

Corporate Property (REIT), N.Y.	14.8
Bank One Trust, Columbus	13.7
Equitable Life, N.Y.	13.5
First of Boston	13.2
First of Chicago (Fund F)	13.1
Interfirst Bank, Dallas	12.8
Aetna Life & Cas. (RESA), Conn.	12.5
Wells Fargo Realty Adv., Calif.	11.7
Prudential (PRISA), N.J.	11.3
Mercantile Trust (Fund R), Mo.	11.3
Travelers, Conn.	11.0
John Hancock, Mass.	10.9
Citicorp, N.Y.	10.9
Seafirst Bank, Wash.	10.4
Crocker National (Eq. P), Calif.	10.1
Bank of America, Calif.	9.4
Consumer Price Index	**4.8**

10-year returns

	%
Corporate Property (REIT), N.Y.	19.5
Morgan Guaranty, N.Y.	18.9
Wachovia Bank, N.C.	14.8
Prudential (PRISA), N.J.	14.7
Metropolitan Life, N.Y.	13.5
Equitable Life, N.Y.	13.1
Wells Fargo Realty Adv., Calif.	12.7
First of Boston	12.4
First of Chicago (Fund F)	12.2
Bank of America, Calif.	10.3
Consumer Price Index	**7.0**

Real Estate Closed-end funds
Period ended Dec. 31

1-year returns

	%
JMB Institutional (Trust I)	23.1
Coldwell Banker (Fund V)	18.3
Aetna Life & Cas. (Ceresa I)	17.9
John Hancock (SERA 1), Mass.	17.4
Equitable Life (16I), N.Y.	15.8
Landauer Advisors (Fund I)	15.3
LaSalle Advisors, Ill.	15.2
Rosenberg (Mid-Am. II)	14.3
Rosenberg (Mid-Am. III)	13.9
Coldwell Banker (Fund II)	13.5
Coldwell Banker (Fund VII)	13.0
State Street Bank (Fund I), Mass.	12.7
Sarofim Trust Co.	11.7
Rosenberg (West V)	11.5
Rosenberg (REEF III)	11.4
CIGNA Corp., Conn.	11.0
JMB Institutional (Trust II)	10.9
Rosenberg (USA I)	10.9
Coldwell Banker (Fund IV)	
State Street Bank (Fund II), Mass.	
Rosenberg (REEF II)	
Rosenberg (REEF I)	
Metropolitan Life (I), N.Y.	
Coldwell Banker (Fund III)	
Coldwell Banker (Fund VI)	
Rosenberg (Mid-Am. I)	
JMB Institutional (Trust III)	
Rosenberg (REEF IV)	
Consumer Price Index	
Rosenberg (USA II)	

3-year returns

JMB Institutional (Trust I)	
Coldwell Banker (Fund V)	
State Street Bank (Fund I), Mass.	
LaSalle Advisors, Ill.	
Coldwell Banker (Fund II)	
Sarofim Trust Co.	
Equitable Life (16I), N.Y.	
Rosenberg (Mid-Am. II)	
Rosenberg (REEF III)	
Coldwell Banker (Fund IV)	
Rosenberg (REEF II)	
Coldwell Banker (Fund VII)	
Rosenberg (USA I)	
Coldwell Banker (Fund III)	
Rosenberg (USA II)	
Coldwell Banker (Fund VI)	
Rosenberg (REEF I)	
Rosenberg (REEF IV)	
Rosenberg (Mid-Am. I)	
Consumer Price Index	

5-year returns

JMB Institutional (Trust I)	
Coldwell Banker (Fund II)	
Coldwell Banker (Fund V)	
LaSalle Advisors, Ill.	
Coldwell Banker (Fund IV)	
Rosenberg (REEF I)	
Rosenberg (REEF II)	
Coldwell Banker (Fund III)	
Consumer Price Index	

10-year returns

Coldwell Banker (Fund II)	
Consumer Price Index	

Falling rates . .

Continued from page 29

than the value of the property.

Two years ago when there
a trend toward investment
mortgages rather than owners
the situation was much differe

"Then when cash-on-cash yi
on ownership were down in
same general range where they
now, many pension funds
other sources of capital felt tha
they could put money out in
mortgage market at 11%,
should they buy property yield
8.5% or 9%?" he said.

At that time, he said, they
worked out equity kicker featu
that made the loans more attract

Now, he believes, some pens
funds are trying to find ways
have "first priority ownership p
tions" rather than debt positions.

When good participating m
gages can be made, there is no
son, he said, they shouldn't
made. But, he added, in instan
when the initial yields on a m
gage or ownership are the sa
the greater upside generally ex
with ownership.

What will start a "whole
wave" of investors seeking to
owners, he said, will be positive
erage. Positive leverage is the us
borrowed money to increase
return on an investment, an
hasn't been available to investor
periods of high interest rates.

"When interest rates in
seven-year market broke the
level, that really started to be
influential on a manager's d
sion to look at the potential
leveraging," said Mr. Ramseyer

But, he added, many of the l
commingled funds can't use le
age. Pension fund sponsors
expressed fear of it when t
were first getting into real est
and many managers made it a p
icy not to use it.

He thinks where positive le
age will likely be used is those p
sion funds making direct deals.

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Many real estate investments may look good in the short run, but The NCNB Real Estate Fund has passed the ultimate test...the test of time. Call Mark Coltrin, NCNB Trust Group Vice-President for details at (704) 374-8405.

*As reported by CDA Investment Technologies, Inc. for the period ending 12/31/85.

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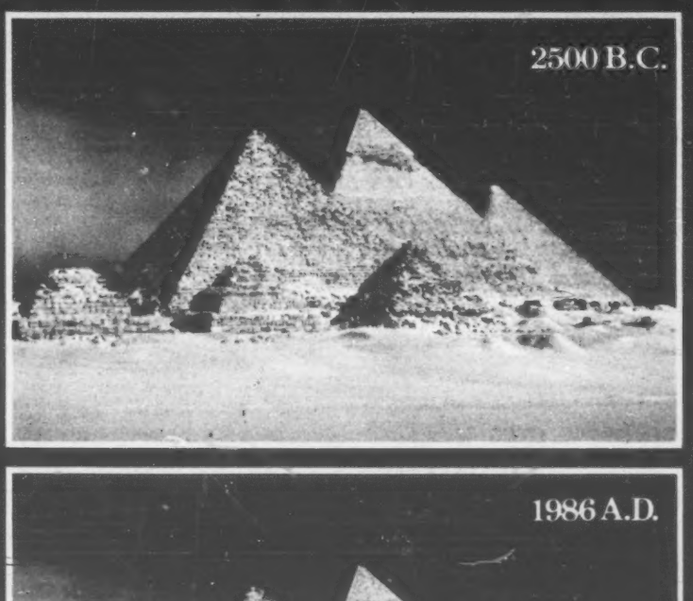
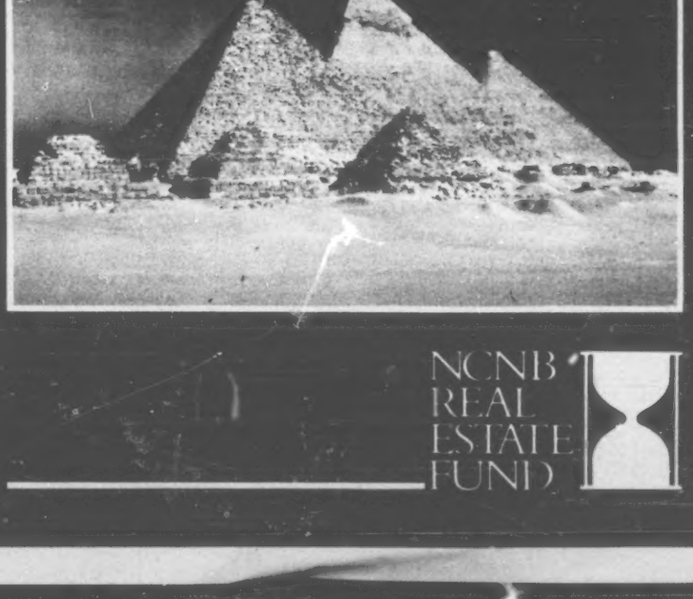




NCNB REAL ESTATE FUND

PIPER

The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. *PIPER details comparative performance data on special equity and international funds at more than 50 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

Risk-taking puts First of Neenah in front

By Brad Rudin

Financial institutions, companies featuring new products and takeover targets boosted the returns of special equity commingled funds during the year ended March 31.

The leading fund, as rated by Pensions & Investments' Performance Evaluation Report, boasted a return that almost doubled that of the Standard & Poor's 500 stock index.

That fund, a regional bank portfolio managed by The First National Bank of Neenah (Wis.), delivered a return of 72.1% that towered over the 37.1% S&P performance and the median 31.7% return produced by the 100 special equity funds rated by PIPER.

Ken J. Brusda, a First National Bank of Neenah vice president, acknowledged that putting all of his eggs in the $11 million bank portfolio could produce bad results if the industry ran into trouble.

"In order to make above-average profits you have to take some risks," he said.

First of Neenah produced a 59.7% return in calendar-year 1985, a performance that made it the top-performing PIPER fund. For the same period, the S&P 500 returned 31.8%, while the median fund earned a 27% return.

Joining First of Neenah in the top five for the year ended March 31 were Fidelity Management Trust, Boston, 56.9%; Equitable Bank, Baltimore, 55.6%; Chase Investors Management Corp., New York, 53.8%; and Citicorp Investment Management Inc., New York.

Fidelity's "aggressive equity" fund also holds second-place honors with a compound annual 29.2% return in the three-year PIPER survey, while the Chase "intermediate capitalization equities" fund ranks third in the five-year category, with an annualized 23.4% return.

In the 10-year period, Equitable Bank's special fund ranks first with a compound annual 26.7% return.

On the downside, the "diversified special value" fund of Wachovia Bank & Trust Co., Winston-Salem, N.C., slipped from fourth place in the three-year survey to the 22nd spot in the one-year report.

Still, the Wachovia fund — at a 40.6% return — outperformed the S&P by almost three percentage points.

Only 31 of 100 special equity funds outperformed the S&P 500 in the year ended March 31.

First of Neenah's Mr. Brusda said the bank's strategy for beating the index rests on the fund managers' insight into Associated BanCorp, the holding company that owns First National.

"We started off looking for clones of our own bank corporation," he said.

Changes in state banking laws, which allow banks in one state to buy banks in another, are one aspect of the "double play" made by First National, Mr. Brusda said.

"The key thing has been the interstate banking that has caused more people to focus on this area and push up the price," he said, citing **Chemical Bank's** planned acquisition of **Horizon Bancorp** (Morristown, N.J.), a stock in the First National special equity portfolio.

The other part of the "double play" has been First of Neenah's purchase of bargain bank stocks, Mr. Brusda said. "The banks were selling at low (price-earnings ratios) — five, six, seven times earnings. Plus, they had very consistent growth rates. From a valuation standpoint, they looked cheap."

Similar reasoning was offered by W. Patrick Flanigan, a vice president at Equitable Bank. Regional banks, he said, are attractive on their own or as takeover candidates. "If you can get both, then you don't lose."

Mr. Flanigan said five of the 38 banks in the Equitable portfolio were taken over last year, while another five are takeover candidates.

Equitable Bank has tried to buy the stock of banks located in the mid-Atlantic region, where takeover activity is high, he said. A "domino effect" pushes up the stock price of both acquired and non-acquired banks, he said.

> *"In order to make above-average profits you have to take some risks."*
> — Ken J. Brusda, First of Neenah

Picking the right city, he added, can be as important as picking the right bank.

Although Mr. Flanigan praised the bank stocks, calling them Equitable's "most successful group," his fund also held stocks in the consumer and service sectors during the year ended March 31.

Nursing and retirement homes have been a good play for Equitable, he said. "We've been playing the graying of America concept for the last 10 years."

The aging of the population means good opportunities for money managers seeking substantial gains, he said. "This is a high-occupancy industry with tremendous demand. It's a great supply-and-demand situation."

Takeovers of companies providing service to the elderly add to the potential gain, he said, citing Equitable's ownership of stock in **Health Care and Retirement Corp.** and the **Mediplex Group** — both the object of successful takeover bids.

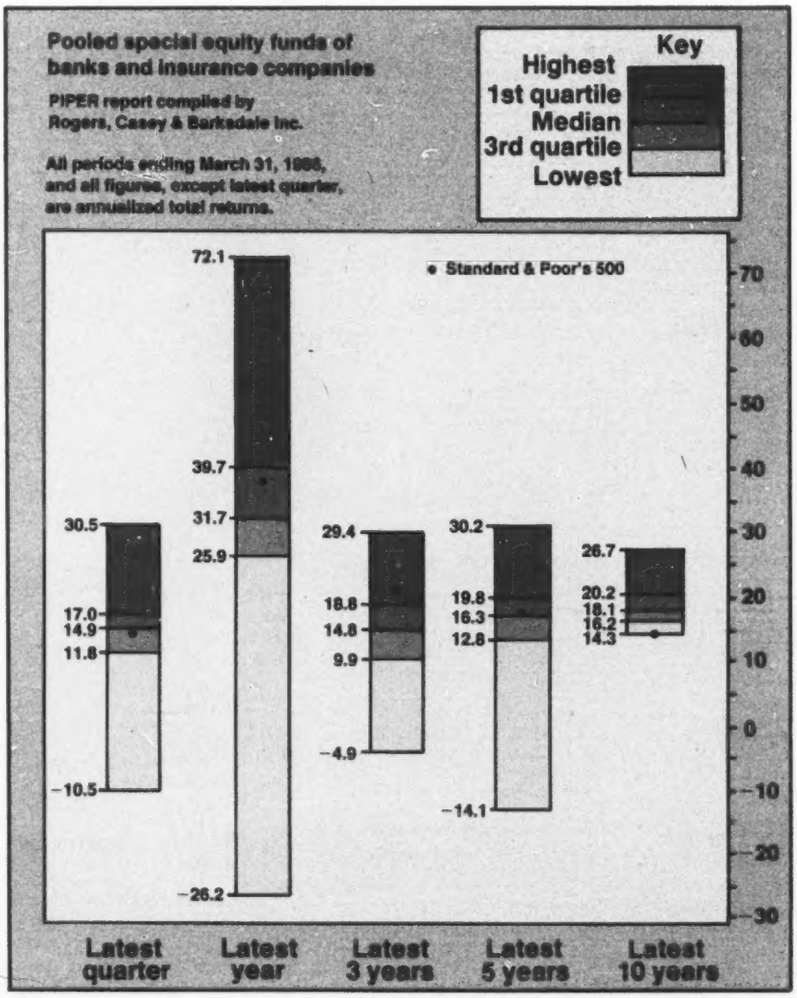
The $2.5 million "special fund" is an "aggressive kicker for a big capitalization equity fund," he said. "We are going for home run stocks."

Trailing Equitable in the one-year report was the $275 million Chase Investors fund, which counted on companies with new products. "One of the areas that paid off really handsomely is the new product area," said Neal Miller, a Chase vice president.

For example, Mr. Miller said he was attracted by the development of human growth hormones at **Genetech** and the marketing of a wine cooler by **Canandaigua Wines**.

Chase selects stocks that could benefit from some legal, demographic or economic

Continued on page 36



Top performers looked to the Continent

By Rose Darby

The top-performing managers of commingled international funds for the quarter and other periods in Pensions & Investments' Performance Evaluation Report kept a careful eye on changes taking place in the continental European markets, and did some selective buying of equities in Japan.

PIPER monitors the returns of 31 international equity and fixed-income funds.

In every time period, equity returns smartly outpaced fixed-income returns.

Bank of America's $52 million International Employee Benefit Equity fund led all others for the quarter, year and three years ended March 31.

The fund, managed in London by BAIMCO International Ltd., had a total return of 45.2% for the quarter.

"More important than allocation by market is the kind of stocks selected in each market," explained Chris Carter, investment manager in charge of equities for BAIMCO. "We are more concerned about the global sector and how stocks will do in a given environment."

The broad areas in which to buy stocks BAIMCO officials have identified are those that would benefit from the current environment of slowing growth and falling interest rates, he said. Financial, insurance company and bank stocks all were purchased because they would benefit from falling interest rates, Mr. Carter said. Utility and consumer stocks also were purchased because consumer spending was seen as the driving force behind current economic growth, he added.

For most of the past 18 months, roughly 75% to 80% of the total portfolio was weighted in European equities falling into those categories, said Mr. Carter.

Positions in France, the Netherlands, Italy, Spain and Belgium were overweighted because these markets displayed more inefficiencies than those in the rest of Europe, he said. "These are countries in which we are looking for significant earnings gains for a number of years."

Bessemer Trust Co., New York, with its Equity Fund E, came in second for the quarter, with a total return of 30.4%. Marine Midland Bank, New York, was third, with 30.3% on its International Equity fund.

The Morgan Stanley Capital International Europe Australia Far East index had a 30% total return for the first quarter.

For the year ended March 31, Bank of America again had the top-performing international equity fund, with a total return of 116.2%.

The Putnam International Trust, an equity fund managed by Putnam International Advisors, Boston, was second, with a total return of 96.7%. Marsh & McLennan Trust Co., Boston, is the parent of Putnam International.

Third for the full year was the International Equity Fund of Aetna MIM Asset Management Ltd., Hartford, Conn., with 93.4%.

Caesar Bryan, director of Aetna MIM and the manager of the $160 million fund in London, attributed its good performance in part to the move out of deutsche mark-bloc countries (those whose currencies move in tandem with the deutsche mark) and into the Japanese market toward the end of 1985.

"We did well in the Japanese market, and we got the timing right in Japan," he said. "Everybody was in Europe in the fourth quarter of 1985 but they didn't get out during the first quarter of 1986 and we did, while managing to get money into Japan."

By Dec. 31, and throughout the first quarter of 1986, the fund had a 51.4% weighting in Japanese stocks, as opposed to the EAFE weighting of 39.3%, he added.

Exposure to stocks in Germany, the Netherlands and Switzerland were reduced, he said. Positions were maintained in Italy, where the market advanced 69.1% in U.S. dollar terms during the first quarter of 1986; in France, where the market advanced 39.6% during the same period; and in Spain, where the market rose 67.8%, Mr. Bryan said.

Citicorp, New York, placed fourth for the year with its International Equity fund, which returned 93.1%. Fifth was Bessemer's Equity Fund E, which returned 92.6%.

The EAFE for the year period stood at 85.9%.

Continued on page 36

Commingled special equity funds

3-month returns

	%
Republic Natl., Dallas	30.5
Fidelity Mgmt. Trust (aggres.)	23.0
Equitable Bank, Md.	22.1
Manufacturers Hanover, N.Y.	22.1
Chase Manhattan (inter. cap.)	21.8
Provident National, Pa.	21.5
Security Pacific (Fund G), Calif.	21.3
Harris Trust, Ill.	21.2
Society National (e.m.), Ohio	20.6
Chemical Bank (F), N.Y.	19.9
Fidelity Mgmt. Trust (sm. co.)	19.4
Trust Co. of the West	19.1
Merchants Natl. (Fund 2), Ind.	18.8
Connecticut Nationai	18.7
Wachovia Bank (div. spec.), N.C.	18.4
Morgan Guaranty (supple.),N.Y.	18.4
Citicorp (emerg. health), N.Y.	18.3
Mellon Bank, Pa.	18.1
Shawmut Bank, Mass.	18.1
Old Second Natl. (10), Ill.	18.1
Northern Trust, Ill.	17.4
First Tennessee, Memphis	17.3
American Fletcher (natl. res.)	17.3
Irving Trust (Fund II), N.Y.	17.0
Norwest Bank, Minn.	17.0
Standard & Poor's 500	**14.1**

1-year returns

	%
First of Neenah (reg. bank), Wis.	72.1
Fidelity Mgmt. Trust (eq.), Mass.	56.9
Equitable Bank, Md.	55.6
Chase Manhattan (inter. cap.)	53.8
Citicorp (spec. sit.), N.Y.	46.6
Society National (e.m.), Ohio	44.9
Trust Co. of the West	44.8
Bankers Trust (supple.), N.Y.	44.8
Citicorp (emerg. health), N.Y.	44.2
Security Pacific (Fund G), Calif.	44.2
Merchants National (Fund 2), Ind.	43.5
Manufacturers Hanover (supple.)	43.1
Harris Trust (spec. cap.), Ill.	42.9
Mellon Bank, Pa.	42.9
Norwest Bank, Minn.	42.5
LaSalle National (sm. cap.), Ill.	42.2
Manufacturers Detroit (I)	41.6
Marsh & McLennan Trust (growth)	41.6
Shawmut Bank, Mass.	40.9
Irving Trust (Fund II), N.Y.	40.8
Old Second Natl. (10), Ill.	40.7
Wachovia Bank (div. spec.), N.C.	40.6
Connecticut National (supple.)	39.9
American Fletcher (nat. res.), Ind.	39.7
Standard & Poor's 500	**37.7**

3-year returns

	%
Republic National, Dallas	29.4
Fidelity Mgmt. Trust (agg.), Mass.	29.2
Shawmut Bank, Mass.	24.2
Wachovia Bank (div. spec.), N.Y.	23.6
First of Boston (yield)	23.3
LaSalle National (sm. cap.), Ill.	23.2
Manufacturers Hanover, N.Y.	22.9
Trust Co. of the West	22.7
Citicorp (r.e.), N.Y.	22.5
Merchants National (No. 2), Ind.	22.0
Citicorp (spec. sit.), N.Y.	21.7
Mutual of New York	21.6
Chase Manhattan (inter. cap.)	21.3
Standard & Poor's 500	**21.2**
Associated Kellogg (growth), Wis.	20.8
Provident National, Pa.	20.5
Natl. Bank of Detroit (oppor.)	20.5
Mellon Bank, Pa.	19.9
Society National (Ohio reg.), Ohio	19.1
American Fletcher (nat. res.), Ind.	19.0
Old Second Natl. (10), Ill.	18.9

5-year returns

	%
Security Pacific (Fund G), Calif.	30.2
Citicorp (r.e.), N.Y.	24.5
Chase Manhattan (inter. cap.)	23.4
Provident National, Pa.	23.0
First of Maryland	22.3
First Trust Co., Minn.	21.9
Citicorp (spec. sit.), N.Y.	21.8
Connecticut National (supple.)	21.6
First of Boston (yield), Mass.	21.3
Norwest Bank, Minn.	20.9
Merchants National (No. 2), Ind.	20.8
Manufacturers Hanover, N.Y.	20.8
Chase Manhattan (value), N.Y.	20.7
Bankers Trust (supple.), N.Y.	20.4
First Pennsylvania Bank	20.0
California First Bank (supple.)	19.8
Standard & Poor's 500	**17.5**

10-year returns

	%
Equitable Bank, Md.	26.7
MTrust, (growth), Texas	25.9
Northern Central, Pa.	23.7
First of Maryland	23.1
Bankers Trust (supple.), N.Y.	23.0
Chase Manhattan, N.Y.	21.7
California First Bank (supple.)	21.5
Bank of America (em. ben.), Calif.	20.8
Provident National, Pa.	20.6
Norwest Bank, Minn.	20.3
Standard & Poor's 500	**14.3**

First of Neenah . . .

Continued from page 35

change, Mr. Miller said. "Then we do a green eyeshades deal to make sure what we own."

At Citicorp, the manager of the $220 million fund said he looks for companies that are restructuring or redeploying assets. Ted J. Ujazdowski, vice president, said **Gulf and Western's** narrowing focus on media and financial services will make it a profitable company.

He also cited **Prime Motor Inns**, praising the company because of its real estate transactions.

In the results for the quarter ended March 31, RepublicBank, Dallas came in first with a 30.5% return that outpaced the S&P 500's return of 14.1%. The median special equity fund in the PIPER universe returned 14.3%.

Portfolio manager Ben J. Fischer said his "select equity" portfolio typically has a small number of stocks, sometimes as few as three. "The 'putting all the eggs in one basket' strategy should result in long-term above-average performance," Mr. Fischer said.

What about the fund's sometimes disappointing performance in the past? "The reason was that I put all my eggs in the wrong basket," he said.

The three-year PIPER survey puts RepublicBank's performance at the top of the list with a 29.4% compound annual total return. The fund, however, is not among the top-rated performers in the year ended March 31.

The three-year report puts Fidelity Management Trust in second place with a compound annual 29.2% return, while Shawmut Bank of Boston finished third with an annualized 24.2% return. The S&P 500 returned 21.2% vs. 18.7% for the median PIPER special equity fund.

Five-year performance honors go to Security Pacific National Bank, Los Angeles, which produced a compound annual 30.2% return. The No. 2 and 3 spots are held by Citicorp and Chase, which turned in 24.5% and 23.4%, respectively. The S&P 500 returned an annualized 17.5% vs. 17% for the median fund in the PIPER universe.

In the 10-year report, top-ranked Equitable Bank is trailed by MTrust, Dallas, which earned a compound annual 25.9% return. Third place is held by Northern Central Bank, Williamsport, Pa., which produced a 23.7% return on investment. For the 10 years, the S&P 500 returned an annualized 14.3%, and the median PIPER fund, 13.6%. ■

Commingled international funds

3-month returns

	%
Bank of America (equity), Calif.	45.2
Bessemer Trust (fund E), N.Y.	30.4
Marine Midland, N.Y.	30.3
EAFE	**30.0**
Aetna MIM, Conn.	29.7
Centerre Trust (coll. W), Mo.	29.1
American Natl., Chicago	29.0
Marsh & McLennan, Mass.	28.8
US Trust, N.Y.	28.1
Fidelity Mgmt., Mass.	27.1
Citicorp (equity), N.Y.	26.7
Mellon Bank, Pa.	25.4
Chase Manhattan, N.Y.	25.4
Crocker National, Calif.	24.7
Morgan Guaranty (equity), N.Y.	24.7
Bankers Trust, N.Y.	24.4
First of Chicago (equity)	24.0
IDS Trust, Minn.	23.5
Republic Natl., Dallas	23.4
HT Investors, R.I.	23.3
California First Bank	22.8
CIGNA Corp., Conn.	20.5
Prudential (global bond), N.J.	18.4
Toledo Trust (equity), Ohio	17.2
Morgan Guaranty (bond), N.Y.	16.4
Prudential (foreign bond), N.J.	16.2
Citicorp (fixed), N.Y.	16.2
First of Chicago (non-DLR fixed)	15.6
Bank of America (fixed), Calif.	14.1
Toledo Trust (global), Ohio	12.6
Travelers Hill Samuel (W), Conn.	10.5
First of Chicago (DLR fixed)	5.9

1-year returns

	%
Bank of America (equity), Calif.	116.2
Marsh & McLennan Trust, Mass.	96.7
Aetna MIM, Conn.	93.4
Citicorp (equity), N.Y.	93.1
Bessemer Trust (Fund E), N.Y.	92.6
EAFE	**85.9**
Marine Midland, N.Y.	84.6
Centerre Trust (coll. W), Mo.	84.0
Chase Manhattan (global), N.Y.	83.6
IDS Trust, Minn.	82.8
California First Bank	82.0
Morgan Guaranty (equity), N.Y.	81.8
First of Chicago (equity)	81.1
American Natl., Chicago	80.8
Fidelity Mgmt. Trust, Mass.	80.4
Bankers Trust, N.Y.	79.7
CIGNA Corp., Conn.	77.0
HT Investors, R.I.	74.8
Mellon Bank, Pa.	72.2
Republic Natl., Dallas	71.1
Toledo Trust (equity), Ohio	71.0
US Trust, N.Y.	70.6
Bank of America (fixed), Calif.	64.6
Prudential (global bond), N.J.	62.9
Crocker National, Calif.	62.0
Citicorp (fixed), N.Y.	58.4
Prudential (foreign bond), N.J.	55.9
First of Chicago (non-DLR fixed)	55.4
Travelers Hill Samuel (W), Conn.	53.7
Morgan Guaranty (bond), N.Y.	47.8
Toledo Trust (global bond), Ohio	43.4
First of Chicago (DLR fixed)	26.6

3-year returns

	%
EAFE	**37.3**
Bank of America (equity), Calif.	36.9
Bankers Trust, N.Y.	35.8
American Natl., Chicago	34.8
Marsh & McLennan Trust, Mass.	34.7
IDS Trust, Minn.	34.5
Citicorp (equity), N.Y.	32.4
First of Chicago (equity)	31.9
Fidelity Mgmt. Trust, Mass.	31.0
Centerre Trust (coll. W), Mo.	29.6
Morgan Guaranty (equity), N.Y.	29.4
US Trust, N.Y.	29.2
Mellon Bank, Pa.	27.8
Bessemer Trust (Fund E), N.Y.	26.9
Travelers Hill Samuel (W), Conn.	26.5
Crocker National (foreign), Calif.	24.2
Prudential (global), N.J.	24.0
HT Investors, R.I.	21.8
Chase Manhattan (global), N.Y.	20.3
Prudential (foreign), N.J.	18.8
Bank of America (fixed), Calif.	18.2
First of Chicago (non-DLR fixed)	18.1
Morgan Guaranty (bond), N.Y.	17.2
First of Chicago (DLR fixed)	17.1
Citicorp (fixed), N.Y.	16.8

5-year returns

	%
Marsh & McLennan Trust, Mass.	23.3
EAFE	**21.7**
Bankers Trust (equity), N.Y.	21.4
American Natl., Chicago	20.4
First of Chicago (equity)	18.9
First of Chicago (DLR fixed)	18.7
US Trust, N.Y.	17.7
Citicorp (equity), N.Y.	17.5
Morgan Guaranty (equity), N.Y.	17.4
Bessemer Trust (Fund E), N.Y.	15.8
Morgan Guaranty (bond), N.Y.	13.5
First of Chicago (non-DLR fixed)	12.7
Cicicorp (fixed), N.Y.	11.4
Crocker National (foreign), Calif.	9.4

10-year returns

	%
US Trust, N.Y.	19.6
EAFE	**19.1**
Morgan Guaranty (equity), N.Y.	17.8
First of Chicago (equity)	16.2

Top performers look to . . .

Continued from page 35

For the three years ended March 31, the EAFE led all fund managers, with a 37.3% return.

Among the PIPER funds, Bank of America's equity fund was first for the three-year period, with a 36.9% compound annual return.

Second was Bankers Trust, New York, with its International Equity fund at a compound annual return of 35.8%. Third was American National Bank of Chicago's International Equity Fund, with a 34.8% annualized return.

For the five years ended March 31, Putnam International Trust was the leading fund, with a 23.3% compound annual return.

That $140 million equity fund maximized returns during the past five years by being very early in overweighting the continental European markets, said Sean Roche, international portfolio manager for Putnam International Advisors Inc.

Early in the decade, "we saw tremendous social changes in Europe, with a dramatic shift in the political spectrum from left of center to right of center," he said. "There was a tremendous emphasis on profitability. For the first time, it paid companies to cut costs, unlike in the 1970s, when governments followed full employement policies."

The move upward in the European markets began in the second half of 1982, he said. "In the last 18 months, we've had the full benefit of that move in Europe."

Bankers Trust's International Equity fund was second for the five years, returning an annualized 21.4%, followed by American National Bank's International Equity fund with 20.4%.

The EAFE for five years returned an annualized 21.7%.

Only three international funds have a 10-year track record. Of them, U.S. Trust Co., New York, was the leader. Its International Equity Fund had an annualized return of 19.6% for the 10 years ended March 31. The EAFE returned an annualized 19.1% during the same period. ■

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U.S. bond market rally faltered in April

NEW YORK — The dramatic U.S. bond market rally stalled in April, with returns on one-year and longer taxable bonds averaging 0.48%, as measured by the Salomon Brothers Broad Investment-Grade bond index.

"The April results contrasted sharply with the 3.9% and 3.2% results posted in February and March, respectively, and were the smallest since last July, when returns averaged −0.46%," said a report written by Richard I. Johannesen, vice president in Salomon Brothers' bond market research department.

Although most sectors experienced price declines in April, longer-term bonds were hit hardest, averaging −0.3%. One- to 10-year issues, in contrast, returned 0.75%.

Several sectors showed reversals from recent trends. Thirty-year coupon STRIPS, which returned 30% in February and 22% in March, returned −2.35% in April.

Mortgage securities, which lagged most other sectors in recent months, edged into a lead position in April.

The index covers $1.7 billion in par value U.S. Treasury, federal agency, corporate and mortgage fixed-income securities with ratings of BBB or better and maturities of a year or more. ■

Pensions & Investment Age

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Ashland Oil plans ESOP-based program

By Marci Baker

RUSSELL, Ky. — Ashland Oil Inc. plans to set up the largest known floor offset pension program at a time when government agencies might be clamping down on such programs.

Ashland, which only months ago successfully defended itself against a hostile takeover bid from the Belzberg family, plans to put a sizable portion of company stock into the hands of employees and to pay for pension benefits through a combined employee stock ownership plan and its defined benefit plan.

Bank of New York, New York, and Hartmarx Corp., Chicago earlier decided to set up floor offset programs (*Pensions & Investment Age*, March 17).

But while interest among corporate pension officials in floor offset programs is climbing, the trend could be brought up short by regulatory action in Washington.

The Department of Labor, the Internal Revenue Service and the Pension Benefit Guaranty Corp. all are looking into the new programs. Benefits experts believe they will clamp down on them through rulings that will eliminate much of the incentives to corporations that want to set them up.

At issue is whether these plans are in the best interest of employees and whether they violate provisions of the Employee Retirement Income Security Act.

"Washington is looking very seriously at these plans. They understand that the laws, as they are written, are ambiguous on (the legality) of floor offset plans," said Donald Weeden, principal in charge of the pension group at Morgan Stanley & Co., New York.

"Floor offsets are a real gray area," added Frederick Rumack, director of tax and legal services at Buck Consultants, New York. "It will become an issue, no doubt, for Congress to deal with."

In floor offset plans, companies establish ESOPs designed to provide benefits in conjunction with their existing defined benefit plans. Pension benefits accrued by the formula set up under the defined benefit plan are funded first through the ESOP. Any balance in accrued benefits is provided by the defined benefit plan.

For the most part, companies such as Bank of New York and Hartmarx are funding the new ESOPs by transferring excess defined benefit assets without terminating the existing plan, bypassing the need to buy annuities to cover accrued benefits. In the process, the companies can recapture a larger and tax-free sum for corporate purposes.

Ashland Oil, however, intends to do a spinoff/termination, recapturing between $200 million and $300 million pretax for general corporate use, according to a company spokesman.

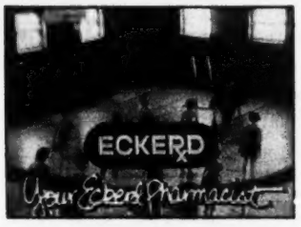
Annuities will be purchased to lock in accrued pension benefits to employees. Future obligations will be satisfied by an ESOP set up by Ashland earlier this year and company contributions to a post-termination defined benefit plan.

As of the fiscal year ended Sept. 30, the actuarial present value of Ashland's pen-

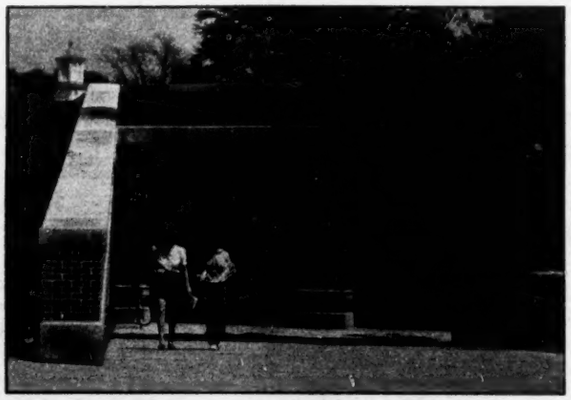
Continued on page 50

Inside:

CORPORATE FINANCE: Despite last-minute snags, Jack Eckerd Corp. has gone private in a $1.3 billion, all-cash deal led by Merrill Lynch Capital Partners — page 33.



LATE NEWS: Exxon Corp. announced at press time that it will recapture more than $1 billion in pension assets through a spinoff/termination of its nearly $5 billion U.S. retirement plan. Exxon plans to file with the PBGC this week — page 54.



ENDOWMENTS & FOUNDATIONS: A trustee's investment know-how managed to turn a benefactor's gift to Buena Vista College into the Harold Walter Siebens School of Business/Forum, above. The small Iowa college's story appears on page 46. Other trends are spotlighted — page 25.

REAL ESTATE: Bechtel's pension fund cut its real estate [illegible] to

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More flexible rule offered

Plan assets definition would ease access to pools

By Joel Chernoff

The Department of Labor will loosen key provisions in its long-awaited definition of plan assets, relieving anxiety that the government would shut off access for private pension funds to many pooled alternative investments.

Department officials strongly suggest a problematical test included in the 1985 proposal put forth under former pension administrator Robert Monks will be eliminated, while another key restriction will be eased.

The final rule will be "significantly less regulatory than the prior proposal," said David M. Walker, deputy assistant secretary for the Pension and Welfare Benefits Administration.

The rule will provide greater flexibility to plans, he said, allowing them "to maximize their investment opportunities."

The 1985 proposal "would have had the result of causing certain kinds of investments to no longer be available to plans, particularly in the real estate and venture capital and oil and gas areas," Dennis M. Kass, the assistant secretary, told the Midwest Pension Conference recently, according to a transcript of his talk.

Loss of such investment alternatives would have hurt plans' ability to diversify their investments, and thus would have harmed plan participants and beneficiaries, he said.

Peter Kelly, a pension lawyer who represented Balcor/American Express on the plan assets issue, praised the department's position as "courageous."

"In effect, they're backing away from an expansion of jurisdiction," he said.

In general, the plan assets definition, which is due out this summer after 11 years of work, will clarify whether an interest in a pool or the assets underlying the pool are considered plan assets.

If there is a "look through" to the underlying assets, then the pool manager would become a fiduciary, and subject to the Employee Retirement Income Security Act's prudence and diversification rules. In addition, ERISA's prohibited transaction rules affecting a plan and related parties would make many normal business practices technically illegal.

What's more, if the manager were considered a fiduciary, it would be unclear whether such a manager would be able to receive incentive compensation; operators of such pools typically charge fees that are pegged to the investments' performance.

The rule would exempt from regulation those pools that are widely held, freely transferable and publicly marketed. However, as expected, an additional requirement that such pools not be "primarily offered" to tax-

Continued on page 52

DOL sues 5 funds' officials

By Trudy Ring

BOSTON — The Department of Labor has sued fiduciaries of five employee benefit plans, charging they violated the Employee Retirement Income Security Act by allowing Atlantic Financial Management Inc. to invest their assets in a speculative stock, AZL Resources Inc.

These plans and other investors already had sued Boston-based Atlantic Financial in connection with the stock transactions, claiming the investments had caused losses ranging from $100,000 to $2.5 million.

The Labor Department filed one suit against eight officials of Unitrode Corp., Lexington, Mass. They also were fiduciaries of the company's profit-sharing plan. They are George M. Berman, Walter B. Gates, Alan R. Shoolman, Norman Lanstrom, Peter A. Brooke, Arthur O. Choate, Arthur L. Goldstein and Kenneth Hecht.

A second suit names as defendants Robert Half of Boston Inc., Robert Half of Providence (R.I.) Inc., Robert Half of Hartford (Conn.) Inc. and Robert Half of Buffalo Inc. and their sole stockholder, Herbert J. Myers, who also is a trustee of each company's profit-sharing plan. Both suits were filed May 21 in U.S. District Court in Boston.

A Labor Department spokesman said the fact these plans have sued Atlantic Financial has no bearing on the department's case. "The fact is that the investments were improper as far as the department is concerned," he said.

The plans' suits against Atlantic Financial have been consolidated, also in U.S. District Court in Boston, and are in discovery proceedings, said an attorney representing the plans in those cases. The investors began filing suits in 1983.

The Labor Department's suit against the Unitrode officials charges Messrs. Berman, Gates and Shoolman, as members of the profit-sharing committee, breached their fiduciary duty under ERISA by allowing Atlantic Financial to invest in AZL, an oil and gas exploration and development company. The purchase of AZL stock and other investments in the same industry caused a failure to diversify the plan's investments and left it open to the risk of large losses, the Labor Department contends.

This suit also charges all the defendants except Mr. Shoolman, as directors of the company,

Continued on page 49

California PERS nears hiring of 7

By Steve Hemmerick

SACRAMENTO, Calif. — California Public Employees' Retirement System trustees have all but signed contracts with seven new money managers for $2 billion or more now managed internally.

All but one of the new managers could sign contracts for performance-based fees.

The trustees also intend to hire two of the seven, First Chicago Investment Advisors, Chicago, and TSA Capital Management, Los Angeles, to provide asset allocation information as well as manage money. Their hiring comes as the retirement system increasingly moves toward systematically setting its allocation of $36 billion in assets, according to Greta Marshall, investment manager for the system.

If contract negotiations are successful, the system will hire five of the seven for equity-oriented management. They are: Fidelity Bank, Philadelphia; Geewax, Terker & Co., King of Prussia, Pa.; Atalanta/Sosnoff Capital, New York; Dimensional Fund Advisors, Santa Monica, Calif.; and Lazard Freres Asset Management, New York.

First Chicago and TSA Capital will serve as balanced managers, providing not only asset allocation information, but also shifting the assets they manage for the system among stocks, bonds and cash. Eventually, they may be given authority to shift assets among other classes as well, Ms. Marshall said.

Each manager will be given between $100 million and $500 million, depending on the size of the managers' current holdings and style of management.

If contracts are signed with all seven, it will bring to 10 the number of outside managers hired by the system. Batterymarch Financial Management, Boston, and Rosenberg Capital Management, San Francisco, previously were chosen as equity managers and given between $300 million and $500 million each.

The system also made Citicorp Investment Management Inc., New York, a discretionary manager for about $500 million. Previously, Citicorp was an adviser for the entire equity portfolio.

The system will seek performance-based contracts with at least six of the seven designated managers. Ms. Marshall noted Dimensional Fund Advisors has been selected as a manager of small-capitalization stocks, some of which are thinly traded. It might be difficult to find a proper benchmark to be used in connection with Dimensional Fund Advisors for use on a performance contract basis, she said.

The only manager so far that has signed a performance-based fee contract with the system is Citicorp. Batterymarch, she said, offered a performance-based contract, but trustees and staff found the fixed fee contract to be low enough and it was the more attractive of the two.

Rosenberg Capital didn't offer a performance-based contract, but the fixed fee contract was priced attractively for the system, she said. She did not give contract figures.

Greta Marshall, investment manager

While seven more managers could be added, the system will not renew its contract with Bankers Trust — Investment Management Group, New York, which is

Continued on page 50

N.Y. will use assets to push Irish cause

By Ed Christman

ALBANY, N.Y. — The movement to use pension fund assets to fight discrimination in Northern Ireland gained momentum when Gov. Mario Cuomo signed a bill encouraging using the $28 billion New York Common Retirement Fund for that cause.

In a related development, the New York City Employees' Retirement System successfully filed suit in a U.S. district court to compel American Brands Inc., New York, to place before shareholders a proxy resolution sponsored by the fund that requires the company to adhere to the MacBride Principles.

Comptroller Edward V. Regan opposed the use of retirement assets to fight discrimination in Northern Ireland.

American Brands had claimed that the MacBride Principles, a set of fair employment guidelines, violated Northern Ireland law.

The law Gov. Cuomo signed was opposed by Comptroller Edward V. Regan, the fund's sole trustee.

Mr. Regan had turned back previous efforts by the governor and other elected officials to use the investment of pension fund assets as an economic threat in fighting discrimination in Northern Ireland and South Africa.

The fund has approximately $740 million in holdings of companies with operations in Northern Ireland.

The Common Retirement Fund is the fourth retirement fund known to have some form of a Northern Ireland policy. The others are the New York City Employees' Retirement System, the New York City Teachers' Retirement System, both in New York, and the

Continued on page 50

De Rance vs. First Wilshire

Foundation sues manager

By Chuck Paustian

MILWAUKEE — De Rance Inc. and the trustees of its retirement plan are seeking more than $40 million in damages from First Wilshire Securities Management Inc., five of its principals and Morgan, Olmstead, Kennedy & Gardner Inc., all of Los Angeles, alleging fraud, breach of contract and breach of fiduciary responsibility.

De Rance Inc. filed the civil suit in U.S. District Court in Milwaukee. De Rance, a non-profit, nonstock charitable corporation, is treated as a foundation for tax purposes.

Those named as defendants are Noble B. Trenham, Frederick L. Astman, Joseph DiLillo, Sidney A. King and Bruce C. Juell.

In a separate action, the directors of De Rance, Erica P. John and Donald A. Gallagher, who is also a trustee of the foundation, filed suit in a state circuit court seeking the permanent removal of Harry G. John as director and trustee of De Rance. Mr. John, Ms. John's ex-husband, is accused in the suit of waste and gross misconduct.

Mr. John was suspended from his positions of president and treasurer of De Rance on Oct. 15, 1984.

According to the removal suit, Mr. John, founder of the foundation, "had always assumed full internal responsibility for the investment strategy of the De Rance portfolio."

In yet another suit, a federal jury awarded $28.2 million to De Rance May 13 in its claims accusing PaineWebber Inc., New York, and Paul Sarnoff, a vice president of PaineWebber, of trading abuses on gold commodities.

PaineWebber has indicated it will appeal the decision.

According to the suit against First Wilshire and Morgan, Olmstead, De Rance is seeking a claim of $40 million, while Ms. John and Mr. Gallagher, who are trustees of the retirement plan, are seeking a $400,000 claim.

The foundation has about $35 million in assets, excluding investments in two television stations and one radio station. The retirement plan has about $1 million in assets.

Calls to De Rance were referred to Smith & O'Neil, Milwaukee, one of the law firms handling the case for the foundation. Attorneys at Smith & O'Neil declined to comment on the case, which is scheduled to go to trial Dec. 1.

The First Wilshire suit alleges Messrs. Trenham and Astman were hired by De Rance, through Mr. John, as investment managers for the foundation's assets in May 1977.

It was not clear with whom the men were affiliated at the time they were hired.

During the same month, De Rance opened brokerage and investment advisory accounts with Morgan, Olmstead. The suit alleges Messrs. Trenham and Astman became employed by Morgan, Olmstead at that time because they had obtained the De Rance account and for the purpose of using Morgan, Olmstead's status as a registered investment adviser.

The suit also alleges that around Aug. 25, 1980, Messrs. Trenham and Astman became employees and principals of First Wilshire and the firm became the investment adviser for De Rance.

According to a First Wilshire spokesman, the two started First Wilshire in June 1980.

Morgan, Olmstead continued to serve as broker for the accounts.

The retirement plan, started in February 1980, opened a brokerage account with Morgan, Olmstead and an investment advisory account with First Wilshire, both in August 1981.

The other principals of First Wilshire, Messrs. DiLillo, King and Juell, all were named because they all had responsibilities for the De Rance accounts.

According to the complaint, the defendants did not disclose the securities purchased were thinly traded ones and that the market prices quoted were available only for small lots. It further claimed the large positions acquired for the plaintiffs could not be sold at those quoted prices and could not be sold at all without long delays

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Clients cut back on equity under the Lowry system

By Trudy Ring

As the stock market has soared, pension funds following consultant William W. Lowry's investment philosophy have reduced their equity exposure in a disciplined manner.

Mr. Lowry, president of William W. Lowry & Associates, Atlanta, holding company for the pension consulting firm Lowry, Raclin, Harrell & Howerdd, Dallas, has developed a system by which clients adjust their stock holdings in accordance with the price-to-book ratio of the market.

The system is customized for each client, but in general, Mr. Lowry recommends clients be at their maximum equity allocation when the ratio is 1-to-1. In the current market, with the ratio at 1.75-to-1 for the Standard & Poor's 500 stock index, most of Mr. Lowry's clients have reduced their equity allocation to between 55% and 65%.

About 95% of the clients follow this strategy, while another 5% use one more heavily oriented toward equities, he said.

"No two of our 120 clients have the identical, to-the-penny grading system," he said. Mr. Lowry's clients have a total of $24 billion in assets; this includes both pension funds and corporate cash.

This includes between $4 billion and $6 billion invested in mutual funds, another official of the firm said. Almost every client uses mutual funds as part of the strategy.

Mr. Lowry said his system does not mandate radical shifts in equity investments. "At X times

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Real Estate

New space woes hit office market

By Steve Hemmerick

CHICAGO — The office market could be undergoing a structural change that could worsen its current cyclical overbuilding problem, according to Joseph Russo, a division manager for real estate investments with the American Telephone & Telegraph Co., New York, pension trust.

The working age population, increasing for the past several years, has reached its peak, and white-collar employment may not be increasing as fast as it has in the past, he said.

That slowdown could mean it will take longer to fill some partly empty office buildings. According to Coldwell Banker's Office Vacancy Index, the vacancy rate is holding at 16.5% in downtown office buildings across the United States, and hit 22.5% in suburban areas as of March 31.

But Mr. Russo didn't say how great an impact the slowdown in the white-collar population might have on the office market, already suffering from some softening in rents.

However, in a talk delivered at the spring Pension Real Estate Association conference in Chicago, he did say AT&T already is near the top of its target range for office buildings as a percentage of its real estate allocation.

AT&T now has 9% of its total $23 billion plan, or $2.07 billion, invested in real estate, and 58% of that, or $1.2 billion, is in office buildings. The target range is 40% to 60% of the real estate dollars.

The trust, he said, wouldn't buy an office building unless it was a "very selective" purchase of a high-quality building that was fully leased.

In fact, he said, AT&T's focus on making retail investments in the past couple of years has brought down the investment in office buildings a couple of percentage points for the trust.

"So, we might just want to sit back and wait with respect to office buildings," said Mr. Russo.

In any case, he said, AT&T has an immediate target of 10% for real estate, a boost of one percentage point. Most of that amount, he said, could be spent in buying more units this year of the Telephone Real Estate Equity Trust, a $2.1 billion unitized group trust owned by AT&T and the regional telephone companies created by the breakup of AT&T. AT&T owns 40% of TREET.

But TREET, he said, could figure in a significant change this year as well as some other existing real estate assets. He believes AT&T could refinance some of its holdings, taking out cash, although management has not approved that proposal.

Some consultants have said either that interest rates are about low enough, or could soon be low enough to use positive leverage — the use of borrowed money to increase the return on an invest-

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Bechtel lowers target

Real estate commitment now set at 5% of assets

By Steve Hemmerick

CHICAGO — The $1.3 billion Bechtel Corp. defined contribution pension fund has reduced its real estate commitment to the bottom of its target range, 5% of assets, according to Al Kirschbaum, an investment officer for the San Francisco-based company.

Since late 1984, Bechtel has preferred to put new money elsewhere, especially in foreign equities, he said in remarks at the Pension Real Estate Conference held here late last month.

While Bechtel has a 5% to 15% target range for real estate, Mr. Kirschbaum didn't say what the percentage invested in real estate was in 1984, only that the allocation had been reduced.

Part of the percentage reduction, of course, can be credited to the bull equity market and bond market.

But Bechtel officials clearly have taken note of the overbuilding in the office market; Mr. Kirschbaum estimates there is about 1 billion square feet of excess office space nationwide.

The short-term view at Bechtel has been that the company shouldn't commit more assets to real estate.

Market returns have borne this thinking out, he said, because the Standard & Poor's 500 stock index returned about 32% in 1985, the Shearson Lehman Intermediate bond index, about 18% and foreign stocks, about 57%. In contrast, figures from Evaluation Associates Inc., the Westport, Conn., consulting firm, showed open-end real estate funds returned about 10% in 1985 and closed-end funds, about 12%, he said.

But on a long-term view, he noted there is a risk of not being adequately diversified without real estate.

In his view, real estate is kind of an insurance policy against risk.

For example, real estate would fare better than traditional markets in some adverse economic scenarios, including increasing oil prices, high inflation and corporate profit declines, he said.

While Mr. Kirschbaum did not say when Bechtel plans again to increase its allocation to real estate, he did talk about opportunities for investment in 1987 and 1988 in his remarks.

Despite the decline in real estate assets held by Bechtel, Mr. Kirschbaum gave some generally positive remarks about real estate at the spring PREA conference, even seeing the office glut as a plus. It is

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Surplus office space

	1970 to 1987
Total space added (sq. ft.)	3,036,000,000
Total workers added	7,934,250
Total space per worker (sq. ft.)	383
Total space needed: 250 sq. ft. per worker	1,983,562,500
Surplus space (sq. ft.)	1,052,437,500
Absorption in years*	7

* Absorption rate 600,000 employees per year

Source: Bechtel Investments Inc., San Francisco

EDITOR'S NOTE: Aldrich, Eastman & Waltch Inc., Boston, and Jones Lang Wootton Realty Advisors, New York, were omitted inadvertently from this chart, which ran in the May 19 issue.

25 largest real estate managers ranked by equity real estate assets

Rank	Managers	$ millions
1.	Prudential Asset Management Group	5,828
2.	Equitable Real Estate Investment Management	4,383
3.	Copley Real Estate Advisors	3,500
4.	Corporate Property Investors	2,400
5.	The RREEF Funds	2,265
6.	Heitman Advisory	2,100
7.	Aetna Life and Casualty	2,055
8.	Richard Ellis	1,510
9.	Aldrich, Eastman & Waltch	1,500
10.	JMB Institutional Realty	1,500
11.	LaSalle Advisors	1,500
12.	Boston Co.	1,272
13.	Eastdil Realty	1,200
14.	J.P. Morgan Investment	1,133
15.	CIGNA	864
16.	Trust Company of the West	820
17.	Schroder Real Estate Associates	802
18.	Coldwell Banker Capital Management	800
19.	First Chicago Investment Advisors	789
20.	Security Capital Real Estate	745
21.	John Hancock Financial Services	708
22.	Jones Lang Wootton Realty Advisors	650
23.	Wachovia Bank & Trust	648
24.	Alex. Brown Realty Advisors	600
25.	L&B Real Estate Advisors	600
	TOTAL	40,172

Active management promised

GE personnel start firm

By Steve Hemmerick

NEW YORK — Two top officials managing the General Electric Pension Trust resigned in mid-May to open a new real estate investment management firm that will offer the active real estate management style used on the GE Trust.

Resigning after 16 years was Francis X. Tansey, manager of the trust and a senior vice president of General Electric Investment Corp., the GE subsidiary that manages the trust. Also leaving was David Luski, formerly real estate investment manager for the GE trust.

The new firm is Dreyfus Realty Advisors Inc., New York, and it has financial backing from The Dreyfus Corp., New York, a manager of mutual funds with $35 billion in assets, and Lazard Freres & Co., New York, an investment banking firm.

Unlike many other real estate firms, Dreyfus Realty will offer what Mr. Tansey, chief executive officer of the new firm, calls active management. This type of management calls for rotating "in and out of market niches."

He said he thinks it is "foolhardy" to stay in one type of real estate market with only one niche in it because the market at various periods overprices niches.

By moving in and out of niches, he said, you can add return, but he is not market timing "per se."

But moving in and out of niches will mean that pension executives will have to give more freedom for active real estate management if they use Dreyfus Realty, and they can't be as narrow in their restriction of investments as they are for some managers, demanding they invest very narrowly in property, such as buying only fully leased and existing properties with all cash.

Francis X. Tansey has left General Electric Investment Corp. for Dreyfus Realty Advisors

The active management thinking for real estate is used on the GE trust, but it is in some ways unusual because many pension fund executives don't think of real estate as anything that can be managed actively or timed in any way.

Mr. Tansey said he is aware of such thinking, but he said he hopes to change it by convincing fund executives that what worked for GE's trust on real estate can work for them.

Each year, as much as 20% of the GE trust portfolio, including real estate, was turned over, said Mr. Tansey. Simple math, he said, shows in five years the entire portfolio could be turned over.

The track record for the GE trust is good, according to Mr. Tansey, but he wouldn't give any figures. He is depending on his track record with GE, he said, to help sell customers. The trust is virtually managed in-house by GE investment.

Mr. Tansey was asked about his own timing — opening a real estate firm when many fund executives are cautious about real estate and worried about overbuilding. Also, the GE pension trust has 12% of its assets in real estate, what GE officials call a "historic low" for real estate.

But Mr. Tansey said he thinks the country now might be approaching the same kind of historic change as in 1979 when Paul Volker, then chairman of the Federal Reserve Board, began his successful shut down of high inflation rates.

The current tax reform proposal, if passed as is, will cause extraordinary values in real estate to occur, and real estate will take

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Cash Management

Largest changes in cash holdings[1]

Company	Cash and short-term investments ($ millions) 1985[2]	1984[3]	% change '85 vs. '84
10 largest cash portfolios ranked by cash position			
Ford Motor	$5,904	$5,943	−0.7%
IBM	5,622	4,362	28.9
General Motors	5,114	8,567	−40.3
Boeing	3,209	1,595	101.2
Chevron	3,168	3,359	−5.7
Chrysler	2,798	1,700	64.6
General Electric	2,557	2,373	7.8
Exxon	2,474	3,290	−24.8
Sun	2,373	1,070	121.8
AT&T Technologies	2,214	2,140	3.5
10 largest increases in cash and short-term investments			
Ralston Purina	$ 510	$ 54	844.4%
Allied-Signal	1,125	136	727.2
IC Industries	241	47	412.8
Union Carbide	459	96	378.1
Martin Marietta	138	30	360.0
Caterpillar	282	62	354.8
United Technologies	972	225	332.0
Ashland Oil	307	82	274.4
Sara Lee[3]	170	56	203.6
Campbell[4]	405	149	171.8
10 largest decreases in cash and short-term investments			
General Dynamics	$ 13	$ 187	−93.1%
Champion International	19	118	−83.9
Dana	29	134	−78.4
LTV	12	53	−77.4
Weyerhaeuser	40	173	−76.9
Phillips Petroleum	676	1,894	−64.3
PPG Industries	24	64	−62.5
Rockwell International	525	1,268	−58.6
Occidental Petroleum	510	1,195	−57.3
Raytheon	284	658	−56.8

Footnotes:
[1] Top 100 industrial companies according to sales
[2] Quarter ended Dec. 31
[3] Quarter ended Dec. 28
[4] Quarter ended Jan. 26, 1986

Source: Wright Investors Services Inc., Bridgeport, Conn.

Short-term, cash holdings fluctuate

By Barry B. Burr

The change in cash and short-term investment holdings of the largest corporations varied widely over the last year, ranging from a 844.4% increase of Ralston Purina Co. to a 93.1% decrease of General Dynamics Corp.

As a group, the cash and cash-equivalent holdings of the 100 largest industrial companies, as ranked by sales, changed slightly at year-end from the same period in 1984.

In total, $70.8 billion in cash and short-term investments were held by the companies at year end, according to the latest data from Wright Investors Service Inc., Bridgeport, Conn.

The total was up 1.9% from the $69.6 million held in the period the year before. (The year-end tallies include 17 companies whose holdings are reported for periods that ended on dates other than

Referring to the data, Hari Kapadia, Wright vice president, said, "It looks like the smaller the company the bigger the change in cash position, while bigger companies haven't as big a change.

"I don't think a high cash position is a good indication," he said. "It's better to invest it somewhere (in operations) than short-term investments."

A large cash position "can reduce their" return on equity, he added. "A company would get 6% to 7%" investing in certificates of deposit, "whereas it might get 15% from operations."

But he noted the cash position, recorded at a specific time, might reflect a cyclical or seasonal pattern for some companies.

In interviews, corporate cash management executives generally attributed cash increases to sales of assets, or buildups of cash by foreign subsidiaries.

Other cash managers attributed

Service fees rise slowly

Cash management costs increase just 2.7% in 1985

By Barry B. Burr

CHICAGO — The price increases of corporate cash management services at the country's leading regional and money-center cash management banks rose on average 2.7% last year, according to a survey by Treasury Strategies Inc.

This represents a sharp slowing in fee increases from rises of 13.3% in 1984 and 18.3% in 1983.

Also, the survey found banks on average-requiring a 16% increase in compensating balances last year.

Treasury Strategies attributed 12.9% of the increase in compensating balance to make up for the decline in earnings due to lower interest rates, while 2.9% of the increase in compensating balance was due to the increase in fees.

Treasury Strategies, which compiles indexes on cash management fees and compensating balances, surveyed 30 banks, consisting of about one-third money-center banks and two-thirds regional banks, according to Anthony J. Carfang, principal.

Major banks charge their corporate customers for cash management services. The index is based on the fees charged for eight services: wholesale lockbox; income wire transfers; outgoing wire transfers; account reconcilement; cash concentration; disbursement; balance reporting; and account maintenance.

The cash management fee increases represent a composite of the price increases of cash management services at regional and money-center banks.

For money center banks, the survey reported fees rose 2.71%, while for regional banks fees increased 2.84%.

By contrast, in 1984 price increases of regional and money center banks differed widely. Regional bank fees jumped 21.3%, while the prices of money-center banks rose 6.5%, Treasury Strategies reported.

Referring to the latest survey, Mr. Carfang said, "A lot of banks simply didn't raise prices at all."

Cathy L. Rollins, also a Treasury Strategies principal, said the latest price increases reflected general inflation.

In previous years, she said, banks were increasing prices to make the services profitable.

"What we've seen in the past is the effects of the Monetary Control Act, from Fed pricing to bank pricing," Ms. Rollins said, referring to the Federal Reserve System. "Banks took the opportunity to price services to make them profitable.

"Those were one-time, systemic price increases."

"Prices have gone up quite a bit since 1980," Mr. Carfang said.

"Banks have become more aware of prices as the Fed has priced services it sells to the banks."

Now, "prices are somewhat aligned with the cost of services," he said.

The composite fee index, which averages both the money center and regional banks prices, reached 197.96 in 1985, up from 192.6. The composite index began at 100 in 1980.

The regional bank fee index reached 168.8 last year, while the money center bank fee index rose to 227.2. Those indexes began in 1980 at 82.19 and 117.81, respectively.

The composite compensating balance index reached 370.57, up

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Suits against Fidelity settled

By Chuck Paustian

BOSTON — As part of a settlement in two civil suits filed in U.S. District Court here, Fidelity Management & Research Co. agreed to credit $400,000 annually in advisory fees for a six-year period to its $4.5 billion money market fund.

Fidelity also agreed not to increase its advisory fees to the Fidelity Cash Reserve Fund for a period of five years as part of the settlement.

The settlement is the latest in a number of similar suits brought against mutual fund companies every year.

Corporate investors held about 12% of the fund's shares as of March 31, according to Richard M. Reilly, executive vice president of Fidelity Management & Research.

Both suits were filed by Frank J. Evangelist Jr., a shareholder of the money market fund, in 1981 and 1982.

In his first complaint, Mr. Evangelist alleged Fidelity charged "excessive" fees for the investment management of the fund's assets.

One of Mr. Evangelist's attorneys, Richard M. Meyer, with the law firm of Milberg Weiss Bershad Specthrie & Lerach, New York, said at the time the lawsuit was begun, Fidelity charged an advisory fee based on the fund's income.

He said for the first 5% of return earned by the fund, Fidelity charged a fee of 4%, or 20 basis points. Any return above 5% was charged a 6% fee, or 60 basis points, said Mr. Meyer.

"At the time the complaint was filed, rates were around 17%," said Mr. Meyer. He said at those rates, Fidelity would have received a fee of 92 basis points.

Mr. Meyer said Fidelity voluntarily placed a ceiling of 55 basis points on its advisory fee after the lawsuits were filed.

"Even so, that was considerably higher than what other money market funds were charging at that time," he said.

Mr. Meyer said the fees charged by other money market funds, at the time of the suit, ranged between 15 and 50 basis points. He added the majority of those companies' fees fell between 30 and 40 basis points.

One percentage point equals 100

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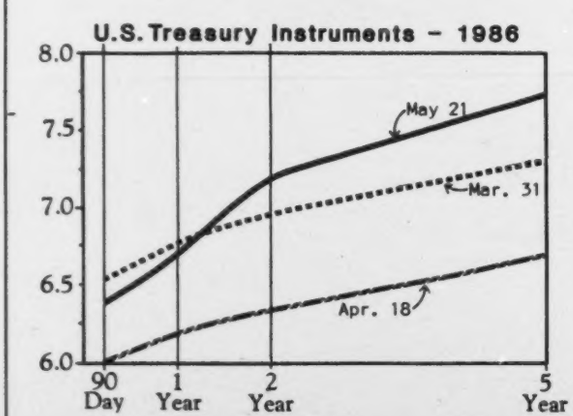
PAYDEN & RYGEL INDEX OF SHORT MATURITY ASSETS

SHIFT IN YIELD CURVE VS. FED POLICY



On April 18 the Fed cut the discount rate ½ of 1% to 6½%. This was reflected in the 0-5 year area by a parallel downward shift of 65 basis points from March 31.

After the cut, rates subsequently rose, creating a steeper yield curve. In the period from April 18 to May 21, the 3-month to 1-year Treasuries were up 40 basis points, while the 5-year was up 100 basis points.

Holdings fluctuate . . .

Continued from page 19

declining cash positions, in general, to stock repurchase programs and retirement of debt.

The cash managers said their firms had no specific objective on the amount of cash they typically hold.

Executives said the huge swings in cash holdings — whether up or down — would have no effect on their short-term investing or borrowing strategies or their cash management staffs.

Officials at the firms reporting the two most extreme cash changes — Ralston Purina and General Dynamics, both of St. Louis — were unavailable for comment.

At Union Carbide Corp., Danbury, Conn., Robert Bose, assistant treasurer, said its 378% increase in cash and cash-type holdings was primarily from a $500 million pension fund reversion.

Union Carbide had $459 million in cash holdings at year end, up from $96 million the previous year.

He said the big jump in cash holdings "caused no change in investment strategy." Union Carbide is staying with conservative short-term investments, Mr. Bose said.

He said Union Carbide is using the extra cash to buy back stock as part of its restructuring. A cash position of about $100 million is normal, he said, and noted that the company has no hard-and-fast policy on its amount of cash holdings.

The cash holdings of Occidental Petroleum Corp., Los Angeles, dropped 57.3%, to $510 million from nearly $1.2 billion.

John Zaylor, Occidental assistant treasurer, said the firm accumulated cash in 1984 by issuing debt.

Then in December 1985, it bought back $1.1 billion in preferred stock.

"When we did that our cash position went down to a modest level," he said.

At Allied-Signal, Morristown, N.J., Roger Matthews, assistant treasurer, attributed the 727.2% rise in cash holdings mainly to the sale of 50% of its interest in Union Texas Petroleum Holdings Inc., Houston, last year. It received $1.4 billion in cash and $300 million in Union Texas preferred stock from Kohlberg Kravis Roberts & Co., New York.

"That was the big reason" for the cash increase, he said.

Allied-Signal's cash holdings rose to $1.1 billion from $136 million.

He said the acquisition of Signal Cos. by Allied Corp. last year was a wash as far as cash holdings. He said Signal had $800 million in cash, while Allied spent $990 million in a tender offer for the firm.

"So, the acquisition of Signal didn't really give us any cash," Mr. Matthews added.

He said Allied-Signal is using the cash to call preferred stock, repurchase common stock and to make an acquisition.

In February, it called $272 million in preferred stock. He said it plans to call another $300 million in preferred stock in August and October, the first time it becomes eligible for call.

In addition, he said the firm plans to repurchase common stock. The total amount under the program hasn't been fixed he said.

Last month, it closed a deal to buy a printed circuit board business from Oak Industries Inc., Rancho Bernardo, Calif., for $150 million to $160 million in cash.

He said Allied-Signal had no goal on how much cash to hold.

"We don't have a quantifiable objective in terms of cash on hand," Mr. Matthews said.

"We like to have cash. We don't necessarily do debt financing to raise cash. We don't necessarily build cash for the sake of building cash."

Having the huge influx in cash, he said, "clearly reduced the need for substantial outside financing."

The cash position at United Technologies Corp., Hartford, Conn., increased 332%, to $972 million from $225 million.

Charles B. Preston, senior vice president and controller, attributed the rise to the sale of its Inmont Inc. unit for $1 billion in cash, minus unspecified income taxes.

He said the rise in cash holdings hasn't affected the firm's short-term investment strategy of buying liquid, fixed-income securities through in-house money management.

"Our short-term investment strategy is driven by (interest) rates," he said. "There was clearly no significant change in it as a result of the proceeds from the Inmont sale."

He said the firm would use the extra cash to buy back an unspecified amount of common stock and to pay down short-term debt.

Despite adding more than $700 million in cash to its balance sheet, the firm's current ratio, or ratio of current assets to current liabilities, changed slightly, improving to 1.7 from 1.6.

"It takes quite a bit to change it," Mr. Preston said of the current ratio, "and it isn't very meaningful."

At IC Industries Inc., Chicago, the accumulation of cash enabled the company to reduce its short-term borrowings by $127 million and eliminate its commercial paper program. At the end of the year, it had no bank debt outstanding.

Last year, the company sold 10 operations, generating $400 million in cash, including $110 million from the sale of 1,558 miles of track on its Illinois Central Gulf Railroad. ■

Questionnaires past due for upcoming directory

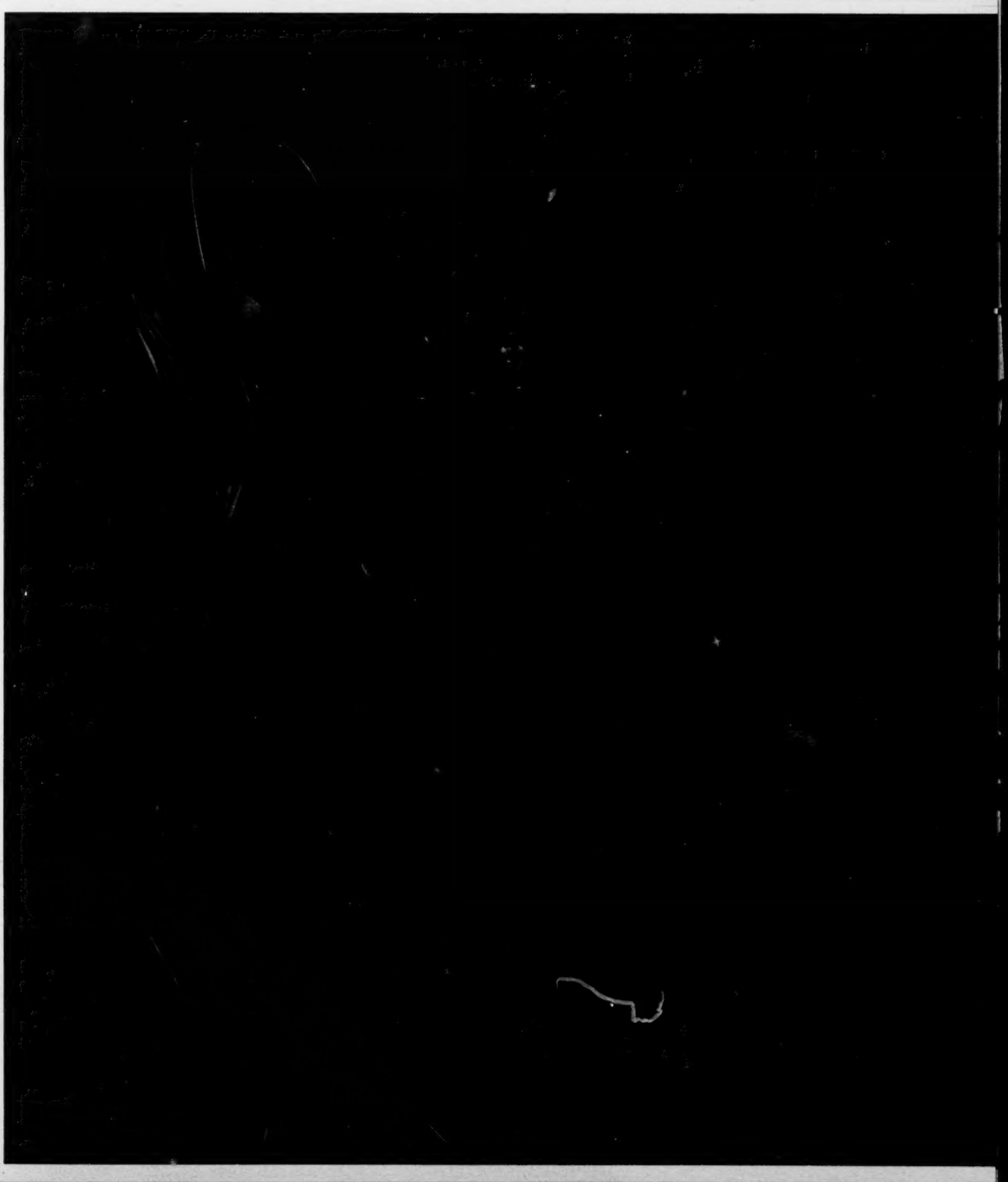
Questionnaires for *Pensions & Investment Age*'s 1986 Cash Management Directory were due June 5.

Any organization providing cash management services in the United States or Canada that hasn't sent in a questionnaire for the directory should return it immediately.

If you have any questions, please contact Carol Wiley, directory coordinator, at (312) 649-5486.

The directory, to be published July 21, is the only known publication of its kind. It will profile the cash management services of banks, service providers, short-term investment managers, as well as national and regional corporate cash management associations.

Also, the directory will profile firms offering treasury workstations, cash management microcomputer software and data bases.



Endowments & foundations

Foundations prepared for market downturn

By Trudy Ring

The nation's 10 largest foundations show little interest in investments touted as means to lock up gains made in the financial markets in recent years.

Instead of adopting portfolio insurance or dedicated bond portfolios, officers of the top foundations look for the discipline of their current investment policies to carry them through any downturn.

"We think about a lot of things, but we are fairly risk-averse now," said Jack Church, vice president and chief investment officer of Glenmede Trust Co., Philadelphia, which is trustee and investment manager for the $2.1 billion Pew Memorial Trusts, also of Philadelphia. "We tend to do better in down markets than up markets anyway."

"We don't have a specific forecast that the markets will go down," said Jack Meyer, treasurer of the $1.5 billion Rockefeller Foundation, New York. "If our managers see a downturn coming, they will take appropriate steps."

Locking up gains is "a negative approach, in my opinion — you're giving away future gains," said Kenneth Herr, treasurer of the $1.3 billion Andrew W. Mellon Foundation, New York. "We believe our investments will continue to do well."

Officials of the $2.5 billion John D. and Catherine T. MacArthur Foundation, Chicago, have looked at portfolio insurance, but are not planning to use it. "We believe if we just ride with the market over an extended period of time, we will do OK," said Philip Grace, treasurer.

John English, vice president and chief investment officer of the $4.5 billion Ford Foundation, New York, noted portfolio insurance is the latest fashion in investing, but said the foundation's basic investment strategy will protect it well enough.

"We are long-term investors, and we recognize that markets are cyclical," he said. "We're very conservative. We're not great risk-takers. The thing that we're attempting to do is protect our income stream" — interest and dividends rather than capital gains.

At least one small charitable fund, the $4.3 million Tom and Valley Knudsen Foundation, Los Angeles, put all its assets into a dedicated bond portfolio last year to pay bequests for 15 years, then expire with a zero balance (*Pensions & Investment Age*, May 13, 1985). However, the larger foundations aspire toward perpetuity.

"My job is to create that 5% that we're going to give away," Mr. English said, referring to the percentage of assets foundations are required to pay out each year. Principal should be preserved so the foundation's work can be carried on indefinitely, he said.

Most of the top 10 foundations would not provide figures on their investment perfor-

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10 largest foundations

	($ mils.)
Ford Foundation	$4,500
J. Paul Getty Trust	2,800
MacArthur Foundation	2,500
Pew Memorial Trusts	2,100
W.K. Kellogg Foundation	1,900
R.W. Johnson Foundation	1,800
Rockefeller Foundation	1,513
Lilly Endowment	1,467
A.W. Mellon Foundation	1,342
Kresge Foundation	936

Source: Asmas provided by the Foundation Center, New York. Figures updated by Pensions & Investment Age.

Photo by T. Charles Erickson, Yale

At Yale University, officials are internally managing some fixed-income investments

Yale sees promise with internal route

Investments office now managing a $200 million fixed-income portfolio

By Brad Rudin

NEW HAVEN, Conn. — Yale University's leap into semipassive internal management of its $1.3 billion endowment's fixed-income portfolio has shown promising results in its first nine months.

While under the management of the university investments office, the $200 million portfolio has returned between 25 and 50 basis points more than the Shearson Lehman Government/Corporate bond index, said David F. Swensen, investments director.

"We were happy we were able to do that," Mr. Swensen said.

Mr. Swensen declined to specify whether more of the $1.3 billion endowment would be managed internally in the future. "It's certainly not something we're ruling out," he said.

Neither internal nor external management has the unanimous endorsement of the top university endowment funds. Harvard University's $2.7 billion endowment is managed internally, while external managers look after Princeton University's $1.7 billion fund.

The current bull market encourages internal management, said John K. Goodrich, president of Colonial Consulting Corp. Inc., New York.

"This time in the market cycle you see a lot of people starting to say that an index return is terrific," Mr. Goodrich said. "It's when the market tanks that people start to reconsider whether it is a smart move."

At Yale, $327 million in assets — the $200 million fixed-income portfolio, $32 million in equities, and $95 million in real estate — are managed internally. External managers run a $12 million real estate portfolio and a $979 million equity investment.

Miller, Anderson & Sherrerd, Philadelphia; Wells Fargo Investment Advisors, San Francisco; Lord, Abbett & Co., New York; General American Investors Inc., New York; and Analytic Investment Management Inc., Irvine, Calif., are the primary domestic equity managers.

International securities are managed by Rowe Price-Fleming International Inc., London; State Street Bank and Trust Co., Boston; and through The Common Fund, Fairfield, Conn.

The investments office, housed in a Georgian building that once was a fraternity house, is not equipped to manage an active equity portfolio, Mr. Swensen said.

Flanked by the Elizabethan Club and the School of Music, the office stands as an outpost of Wall Street on this Gothic campus.

Mr. Swensen, an alumnus of Salomon Brothers Inc. and Shearson Lehman Brothers Inc. said the eight-member investment committee will review the fixed-income portfolio's performance after a year.

Between 30 and 40 issues, governments and agencies, make up the portfolio, said Patricia M. Gammon, the senior financial analyst at the investments office.

The office tries to mirror the Shearson Lehman bond index's breakdown between the Treasury and agency issues, which is 83% and 17%, said Ms. Gammon, a liberal arts graduate of the University of Pennsylvania who is studying to become a chartered financial analyst.

"Our basic goal with the funds we have inside is to produce a small, but consistent increment over the market," said Mr. Swensen, who holds a doctorate in economics from Yale.

Mirroring the Shearson Lehman bond index will give Yale an edge over portfolio managers who use

Continued on page 30

Smaller endowments aided by Common Fund

By Joanne Friedrick

Before joining The Common Fund, Valparaiso University had one money manager and was contemplating adding a second one. Now, through the equity and short-term funds offered by the Fairfield, Conn.-based "manager of managers," it has access to 14 different management firms.

Like many other schools whose endowments are less than $100 million, the Valparaiso, Ind., institution has found greater investment diversity and easier access to top firms through The Common Fund.

Fred Kruger, Valparaiso's vice president for business affairs, said the school switched its $30 million endowment from David L. Babson & Co. Inc., Boston, two years ago.

While the school's eight-year relationship with Babson worked well, Mr. Kruger said many small colleges "can play amateur night" when selecting how and with whom their endowments are invested.

The tendency to give money to the local banker who sits on the college board is still very much in practice, he said.

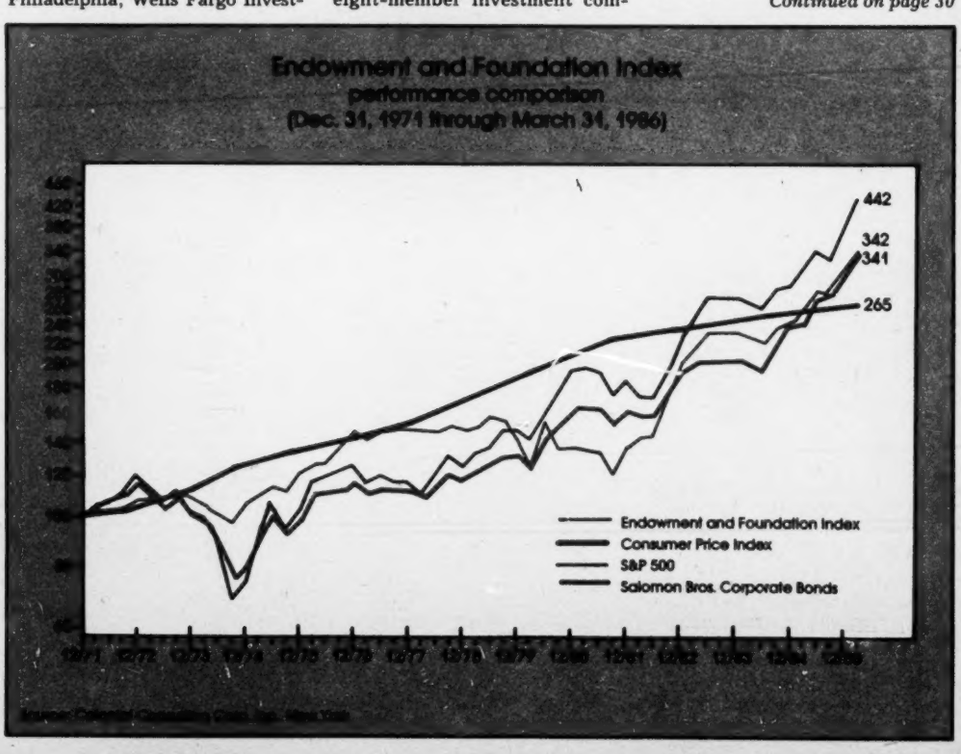
The advantage of moving to The Common Fund, he said, is access to multiple advisers and being pooled with colleges, not pension funds. While Valparaiso stayed away from The Common Fund in its infancy "more people are seeing it's not a fly-by-night organization," Mr. Kruger said.

The Common Fund, which was started in July 1971, was created through the efforts of 10 larger colleges and universities as a way to enable colleges with smaller endowments to get access to better managers.

The fund began with more than 60 participating funds. George F. Keane, president of The Common Fund and its executive officer from the beginning, said "it was an idea whose time had come."

Valparaiso's Mr. Kruger has watched The Common Fund's track record and cited its 10-year

Continued on page 46



Foundations . . .

Continued from page 25
mance, but officials generally said returns have been satisfactory.

"We've participated in the rally since 1982," said Joseph Kearns, vice president and treasurer of the $2.85 billion J. Paul Getty Trust, Los Angeles, which was set up that year, after the settlement of Mr. Getty's estate.

"Obviously, anybody holding shares in an equity portfolio would have benefited," said Thomas Herbert, vice president and treasurer of the $938 million Kresge Foundation, Troy, Mich.

Those that did provide performance figures were the Ford Foundation; the $1.4 billion Lilly Endowment, Indianapolis; and the Pew Trusts.

The Ford Foundation had a compound annual return of 13.7% on total investments for the five years ended Sept. 30, the close of its fiscal year.

The foundation's return has improved in recent years, with total assets moving past $4 billion for the first time since 1964.

The Lilly Endowment returned 15% on an annualized basis for the five years ended Dec. 31, including stocks and bonds, and the Pew Trusts had a compound annualized return of 15.4% for the same period on the manageable portion.

Pew Trusts' investment officials exclude **Sun Co.** stock from the manageable portfolios and therefore from the performance figures, but the Lilly Endowment includes returns on **Eli Lilly & Co.** stock in its overall performance figures. In both cases, the families that owned those companies were the people who set up the foundations.

About 60% of the Pew Trusts' assets are in Sun stock, while 95% of the Lilly Endowment's assets are in Eli Lilly stock.

For the five years ended Dec. 31, the index off approximately 40 foundations surveyed by Colonial Consulting Corp. Inc., New York, had a compound annual return of 14.2%, said John K. Goodrich, president. Colonial Consulting does not identify the funds in its data base.

Most of the top 10 foundations use investments typical of such funds — actively managed stocks and bonds, cash and short-term holdings, and small allocations to venture capital or real estate equity. However, a few vary.

The Lilly Endowment, Pew Trusts, the $1.9 billion W.K. Kellogg Foundation, Battle Creek, Mich., and the $1.8 billion Robert Wood Johnson Foundation, Princeton, N.J., are the members of the top 10 that are invested heavily in one stock. The Lilly family's wish was that the foundation hold the stock as long as possible, said William Goodwin, treasurer and secretary.

Stock dividends and the gains on fixed-income instruments generally have been sufficient to pay bequests, Mr. Goodwin said. The fund's last sale of Eli Lilly stock was in 1972 when it sold 3 million shares; it still holds nearly 25 million shares.

Now, however, the stock's price has gone up so much dividend yields are down to about 2.5% annually, too little to pay the required 5%, so more sales may be necessary, he said.

But the fund's officials have no doubt the stock is a sound investment: "Over the long run, the performance of Lilly stock will be much better than the Standard & Poor's 500," Mr. Goodwin said.

Kellogg Co. stock has been a good investment for the Kellogg Foundation, said William Fritz, vice president-finance and treasurer. About 65% of the foundation's assets are in the stock, but the foundation is under no requirement to hold it and assesses the prudence of the stock investment at least annually, Mr. Fritz said.

"By almost any measurement, it's a strong company and it has proven itself time and time again to be a sound investment," he said.

Kellogg was selling at slightly more than $30 a share when the foundation sold 15 million shares to the company a little over a year ago, Mr. Fritz said. The foundation made the sale to comply with federal tax law prohibiting a foundation from holding more than 35% of a corporation. Now, even after a two-for-one stock split, Kellogg stock is up to $48 a share, he said.

He did not have specific figures on other food stocks, but noted several of them benefited from being takeover candidates.

The remainder of the foundation's assets are divided almost equally between diversified equities and fixed income, Mr. Fritz said. Dividends and interest have been sufficient to pay bequests, but foundation officials now are considering selling some of the diversified holdings to capture capital gains, he said.

He also said stock prices have risen to the point that dividend yields are insufficient to make the 5% payout. This means some downturn in the market, if it didn't reach the point that dividend payments stopped, would not be entirely a bad thing, Mr. Fritz said. "All it would do would be to take some of the pressure off that 5% payout," he said.

He added the nine managers running the diversified portfolios are developing plans to deal with a market downturn.

The nine, hired last summer after the Kellogg stock sale, are First Manhattan Capital Management, Roanoke Asset Management, Morgan Stanley Asset Management Inc. and Neuberger & Berman Pension Management, all of New York; Beutel Goodman Capital Management Ltd., Houston; Lieber & Co., Harrison, N.Y.; Jundt/Capen Associates, Minneapolis; Northern Capital Management Inc., Madison, Wis.; and Strong/Corneliuson Capital Management Inc., Milwaukee.

The Robert Wood Johnson Foundation, endowed with 12 million shares of **Johnson & Johnson** stock in 1975, has been selling shares as necessary to gain income, said William Walsh, vice president and treasurer. About 65% of the foundation's assets are in the stock, the rest in fixed income.

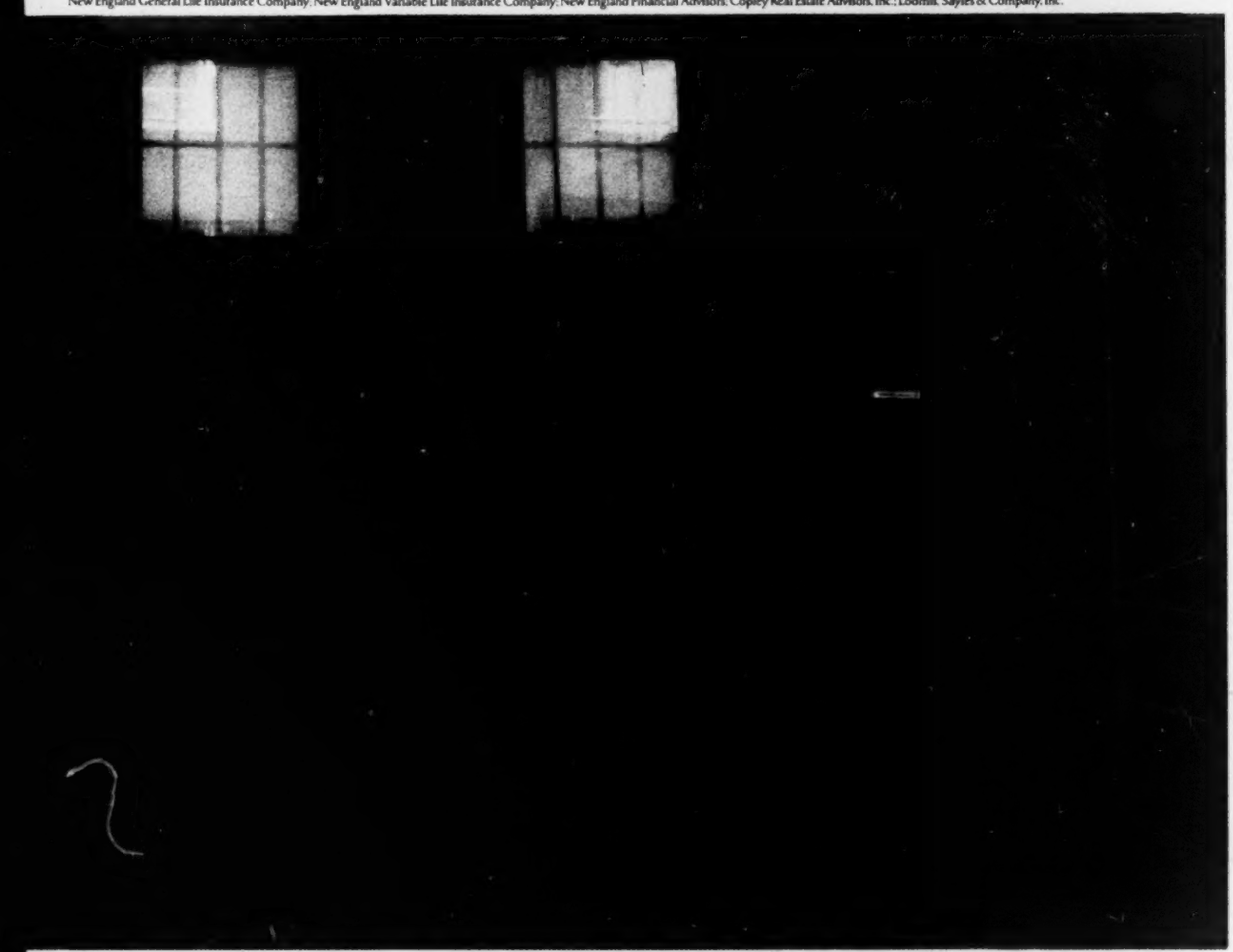
The Getty Trust once was heavily in **Getty Oil Co.** stock, but that was sold to Texaco Inc., White Plains, N.Y., when Texaco took over Getty, Mr. Kearns said.

Until about two years ago, the MacArthur Foundation's investments were limited to **Bankers Life & Casualty Co.** stock and real estate, Mr. Grace said. Now, the real estate allocation remains large — about 38% of assets — but the Bankers Life stock has been sold and the proceeds invested in index funds. The MacArthur Foundation is one of the few charitable funds to use passive management.

"We find that most of the statistics we see show that over a specific period of time, the indexes tend to outperform the individual (active) managers," Mr. Grace said. Also, index funds are a way to enter the market conservatively with large amounts of money, he said.

Wells Fargo Investment Advisors, San Francisco, runs an S&P 500 stock index fund for the foundation, while Mellon Bank, Pittsburgh, handles a Shearson Lehman Government/Corporate bond index fund. Mr. Grace would not provide the breakdown between stocks and bonds, but said the total index funds represent all the assets not invested in real estate. ■

New England General Life Insurance Company; New England Variable Life Insurance Company; New England Financial Advisors; Copley Real Estate Advisors, Inc.; Loomis, Sayles & Company, Inc.



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Five largest endowments

University	Endowment/market value - 1985 ($ billions)	Type of management
Harvard	$2.7 (6/30)	internal
University of Texas	2.6 (12/31)	mostly internal
Princeton	1.7 (12/31)	external
Yale	1.3 (6/30)	mostly external
Stanford	1.1 (12/31)	mostly external

Source: National Association of College and University Business Officers, Washington, and *Pensions & Investment Age*.

Yale sees promise . . .

Continued from page 25
an active approach, Mr. Swensen said. "We expect we will be outperforming many of the active managers by outperforming the market."

The former manager of the fixed-income portfolio, Fischer, Francis, Trees & Watts Inc., New York, earned a 25.2% return in the fiscal year ended June 30, 1985, compared with the Shearson Lehman bond index return of 28.7%.

He declined to say how long Fischer, Francis, Trees & Watts worked for Yale or how much it charged. "This was a decision that was independent of portfolio performance."

Yale decided "the most cost-effective way is to do it internally," Mr. Swensen said.

Active fixed-income managers have to overcome their transaction costs before they can stand on an even basis with managers who employ a passive strategy, Mr. Swensen said. "The active managers are out there hurting their costs relative to the passive manager," he said. "They will not do as well because of price pressure and trading activity."

As practiced by the Yale investments office, passive management is not a buy-and-hold strategy. The staff, using a computer program, balances the portfolio at the end of every month so it matches the changes in the Shearson Lehman bond index.

Although convinced Yale is on the right track with its decision to manage fixed-income internally, Mr. Swensen said the approach has limited application.

Many institutions cannot afford to hire money managers, he said. "There is a corporate culture that makes it difficult to pay market wages with (Wall) Street experience."

Return on domestic equity investments was 29% in fiscal 1985, the Yale annual report said. Investments in the stock market accounted for 73.8% of the endowment on June 30, while debt issues composed 18.1% of the asset mix. Real estate investments accounted for 8.1%.

The annual report also noted the fund's share of fixed income, $189.9 million June 30, fell to 18.1% from 22.6% in 1984.

Yale's bias toward equity is based on the assumption that stocks will perform better than bonds in the long term, Mr. Swensen said, adding other types of assets are used to reduce the volatility of the investment's return.

"The idea behind our approach to equities management is that we have a core portfolio that replicates the index," Mr. Swensen said. Wells Fargo manages that portfolio. He said in the past few years, the endowment has been several hundred basis points above the index.

Because university policy limits spending from endowment income to 4.5% of the fund's total market value, Yale has not been dependent on short-term stock market gains, Mr. Swensen said.

The size of Yale's endowment gives it access to brokers who supply information about the bond market in the hope of getting some of the

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Dynamic hedging for Deere

By Trudy Ring

MOLINE, Ill. — The $2.3 billion Deere & Co. pension fund, one of the nation's 200 largest, has adopted dynamic hedging, but with shorter-term goals than most of the funds using the technique.

Deere is applying the strategy, often called portfolio insurance, to guard its $1.8 billion equity allocation against losses until a long-term asset allocation study is completed, said Carl Liebscher, director of investments. The study is expected to be completed early next year, he said.

More often, funds using portfolio insurance commit for at least two years.

Carl Liebscher, Deere's director of investments

"Our purpose was short term, driven by the fact that we have had a change in actuaries," Mr. Liebscher said. "We are going to do some studies to better define our long-term asset mix and, until we have those completed, we determined that we would like to enter into that type of (portfolio

Continued on page 59

Oil firms tap annuities after plan terminations

By Marci Baker

Following Union Carbide Corp.'s lead, Exxon Corp., New York, will tap a new kind of annuity contract as part of its plans to withdraw more than $1 billion in surplus pension assets through the spinoff/termination of its $5.2 billion U.S. defined benefit plan.

At the same time, Phillips Petroleum Co., Bartlesville, Okla., which will recapture more than $400 million before taxes through a spinoff/termination, might use the new-style contract as well.

Exxon and Phillips are two of three oil companies to announce spinoff/terminations in the past month. Ashland Oil Corp., Ashland, Ky., will recoup between $200 million and $300 million.

Unlike the other two oil companies, however, Ashland plans to establish a floor offset plan, in which its future defined benefit liabilities will be paid for through an employee stock ownership plan and a newly created defined benefit plan (*Pensions & Investment Age*, June 9).

Analysts and other pension observers expect other oil companies will move to terminate their pension funds to get back excess assets for corporate use.

Strong performance in both the stock and bond markets has led to significant overfunding in many oil company pension plans, while the drop in oil prices has put pressure on corporate earnings.

"Any industry under earnings pressure would be looking at pension fund terminations right now," said Donald Weeden, managing director in charge of Morgan Stanley & Co.'s pension consulting group in New York.

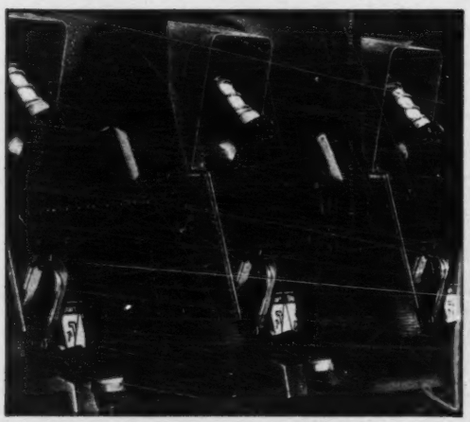
"Oil companies are looking for ways to conserve capital. The (withdrawal of surplus pension assets) can be a tax efficient way to raise money."

Eugene Nowak, an oil analyst at Dean Witter Reynolds Inc., New York, cited Unocal Corp., Amoco Corp., Amerada Hess Corp. and Standard Oil Co. as possible candidates for pension fund terminations.

"We're not looking for a stampede," Mr. Nowak said. "But we expect other fund terminations will develop soon."

Exxon is negotiating with The Prudential Insurance Co., Newark, N.J., and Equitable Life Assurance Society of the United States, New York, and ultimately will select one to establish its annuity program, said Allen Harrison, Exxon's assistant treasurer.

Under the annuity contracts, Exxon will continue



to manage the assets backing its liabilities to the 40,000 active and 30,000 retired participants in the plan, with the insurance company guaranteeing payment of those liabilities.

The insurance company receives a fee to compensate for the risk it is taking to provide the guarantee.

"This is the direction we're taking in negotiations

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Inside:

CORPORATE FINANCE: Major investment banking firms are putting their money where their mouths are — funneling their own capital into the leveraged buy-out deals they have arranged — page 13.

CASH MANAGEMENT: Money management companies aren't getting the corporate short-term investment business. Instead, corporate cash reserves are being given to small, in-house staffs for investment purposes — often because they outperform the outsiders — page 45.

SOFT DOLLARS: Quotron System Inc.'s 1000 system for research data is among the systems that meet the Securities and Exchange Commission's new criteria for purchases that can be made with soft dollars — page 41.

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Fiduciary liability costs soar

Funds to insure each other

By Steve Hemmerick

SACRAMENTO, Calif. — California's two largest state pension funds and other public funds are being forced by skyrocketing fiduciary insurance costs to insure each other by setting up their own reciprocal insurance company.

Larry Kurmel, chief executive officer of the $16 billion California State Teachers' Retirement System, said forming such a company to provide fiduciary insurance is under study and is likely and feasible.

The company could be the first established by public pension funds. Mr. Kurmel said he did not know of any other state funds setting one up. Warren G. Brockmeier, vice president-risk management services at The Wyatt Co., Chicago, said although some reciprocal carriers are being established that include fiduciary liability coverage, he did not know of any such entities established by public pension plans.

"Is this being done elsewhere? To a limited degree, we are involved in other projects involving the establishment of directors and officers liability insurance carriers, and some of them are also including fiduciary liability coverage in what they are forming," Mr. Brockmeier said. "That is essentially because of the lack of availability of coverage in the commercial markets."

But as to public funds forming the companies, he added, "No, I haven't heard of them." He added he was not familiar with what is happening in California.

Private insurers have miscalculated fiduciary insurance risks by lumping them together with directors and officers insurance and errors and omissions insurance, Mr. Kurmel said.

"The primary insurers have not done a precise job of risk quantification (for fiduciary insurance). Based on the research we have done so far, there is healthy opportunity for reducing the premium cost, and that means a saving of dollars for our beneficiaries and for taxpayers," Mr. Kurmel said.

He said his fund has hired Robert Quinn, former California state insurance commissioner, as a consultant on setting up such a company, and hired the actuarial firm Warren, McVeigh and Griffin, Newport Beach, Calif., to do the "numbers crunching."

Public pension fund officials from other California funds and those in "at least a dozen other states" have expressed an interest in becoming members of a proposed reciprocal company, Mr. Kurmel said. He would not identify any.

A reciprocal is an insurance organization in which subscribers insure each other by pooling their individual risks and sharing them proportionately in a non-profit operation. Such companies, which manage their own money, are increasing in number, according to insurance experts.

Part of the reason for the interest, Mr. Kurmel said, is that some California funds, which he would not name, already are going "bare," that is they have no fiduciary insurance.

Another reason may be that the problem developed so quickly.

Continued on page 60

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* May indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	5.3	18.8	35.7
Russell 3000[1]	5.2	19.7	36.1
Ryan Index[2]	−2.5	9.1	22.5
Shearson Lehman Gov't./Corp.[2]	−2.0	6.8	18.4

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

Binzel retiring July 1 as Amoco fund chief; takes two other jobs

By Chuck Paustian

CHICAGO — Philipp W. Binzel, assistant treasurer-investments and overseer of the $2.3 billion pension fund at Amoco Corp., Chicago, is retiring effective July 1.

Mr. Binzel said his decision to opt for early retirement was based on personal reasons.

"Instead of working 80% of the time, I want to work 20% of the time," he said. "It's really not that early. I'm 63."

Mr. Binzel's responsibilities at Amoco included overseeing both the asset and liability sides of the pension fund as well as supervising the company's 14 external investment managers and the management of the $500 million in-house portfolio.

He also was responsible for the corporation's short-term borrowing and investing. Amoco has $900 million in short-term investments.

Mr. Binzel said he has accepted positions to work with two other organizations after his retirement: serving on a new, three-member employee benefit advisory committee established at Continental Illinois National Bank and Trust Co., Chicago and a member of the board of trustees of the $600 million American Red Cross pension fund, where the assets are managed externally.

Richard Powers, vice president at Continental, said Mr. Binzel will serve on the committee with two other Chicago-area executives, Michael E. Murphy, director, executive vice president and chief financial and administrative officer from Sara Lee Corp. and H. Robert Powell, senior vice president and chief investment officer from Combined International Corp.

"The concept is involving three non-director, non-employee individuals to give us an independent assessment of our qualified employee benefit trusts," said Mr. Powers.

He said the committee will review the performance of the three trusts, with a total of $260 million in assets, and submit quarterly reports.

Mr. Binzel said executives have not decided who will replace him, but expects the decision to be made shortly.

In addition, Southern Company Services Inc., Atlanta, has not found a replacement for Ormond Frazier, the assistant treasurer who retired on Aug. 31.

Mr. Frazier was responsible for supervising the management of the $1.6 billion pension fund, all of which is managed externally, and aiding in the establishment of cash management policy.

"The primary function of this position is the pension fund

Philipp W. Binzel

end of the business. The cash management policy setting is secondary, but it's also an important responsibility," said Steve Spears, human resources planning coordinator.

The cash management operation is run through the New York office. Southern Company Services has $650 million in short-term investments.

During the interim period, William Maner, vice president for finance and treasury and Richard T. Benton, staff financial analyst, are handling Mr. Frazier's responsibilities.

Mr. Spears said Southern Company Services decided to delay filling the position until the new chief financial officer, Larry Westbrook joined the company. Mr. Westbrook replaced George B. Campbell, who retired.

Mr. Westbrook joined Southern Company Services Jan. 3, leaving Georgia Power Co., Atlanta, where he was senior vice president and secretary.

"The decision was made in the financial organization that rather than filling the (assistant treasurer's) position prior to the new chief financial officer coming on board, it would be delayed so he could have some input in the decision," Mr. Spears said.

Raymond's ESOP involved

Firm restructures debt

By Barry B. Burr

HOUSTON — Raymond International Inc. is working with its bankers to restructure $200 million in debt, lent originally in 1983 to finance the leveraged buy-out of the firm by an employee stock ownership plan, a management group and Kelso & Co.

The buy-out left the ESOP as Raymond's only retirement plan after the firm terminated an overfunded pension plan to capture a $30 million reversion to help finance the $219 million takeover.

Raymond's fortunes have fallen with the sharp turndown in the energy and construction industries, putting in jeopardy the value of the ESOP shares and its ability to meet its debt obligations.

The ESOP owns the majority of Raymond, according to Joseph Schuchert, managing director of Kelso, New York, which participated in the buy-out.

He said the ESOP owns 65% of the shares, or 80% of the value of the company. He said Kelso owns 5% to 8% of Raymond. Raymond's top management apparently owns the remainder.

Speaking about the ESOP as the only retirement plan, an executive who asked to remain unnamed said, "I don't believe in that philosophy of putting all your eggs in one basket."

But Mr. Schuchert countered, "The fact that they had an ESOP did not in any way prejudice their retirement."

Raymond officials were unavailable for comment on the ESOP.

Mr. Schuchert defended the ESOP arrangement against criticism of being the only retirement vehicle. "That's nonsense," he said. "That's always the case if something doesn't work out."

Yet he also said, "ESOPs aren't retirement plans."

He said Raymond had intended to re-establish a defined benefit plan after the buy-out, before falling on hard times. At the time, he said, the Pension Benefit Guaranty Corp. prevented corporations from immediately re-establishing such plans after terminating overfunded ones. But Raymond's business collapsed while waiting a few years to set up another defined benefit plan.

Before issuing new termination guidelines in 1984, the PBGC was delaying approval of reversions to corporations intending to re-establish defined benefit plans.

Mr. Schuchert said, "There is little or no diminution in the retirement benefits these people got." He noted accrued benefits up to the buy-out were guaranteed by insurance annuities, as required by the PBGC.

He was unclear, however, about the future benefits from the ESOP and how the value of its shares has been affected by Raymond's troubles.

"In five years if it is still struggling and they don't put in a defined benefit plan, the pensions would be affected."

Officials at Houlihan Lokey Howard & Zukin Inc., Los Angeles, which values the Raymond shares annually for the ESOP, declined to comment. The ESOP participants are apparently non-union employees.

Raymond announced a financial restructuring proposal in March with the consortium of eight banks, led by Manufacturers Hanover Trust Co., New York, and Bank of America, San Francisco. Among the banks participating in the consortium is Texas Commerce Bank, Houston.

Bank of America and Texas Commerce officials declined to comment. Officials at Manufacturers Hanover were unavailable.

The debt restructuring agreement hasn't been completed, according to Rae Hunt, Raymond's manager-corporate communications.

"At this point nothing has been finalized," she said.

As part of the agreement, Raymond would be split into two sep-

Continued on page 59

Carpenters revamp lineup

By E[illegible] Christman

NEW YORK — Officials of the approximately $700 million New York City Carpenters pension fund have restructured the fund's investment manager lineup, reportedly hiring six, terminating three and retaining two managers.

Fund officials would not comment on the changes, but sources said among those hired were Oppenheimer Capital Corp. and Dillon, Read Capital Inc., both of New York, for equity management; and Lowe, Brockenbrough, Tierney & Tattersall, Richmond, Va., and Investment Advisers Inc., Minneapolis, for fixed income.

The other two managers reportedly were selected from these finalists: Shields Asset Management, White Plains, N.Y.; Loomis, Sayles & Co., Boston; Hutton Capital Management, New York; and Century Capital Associates, New York.

The amount assigned to the new managers was not revealed.

Sources confirmed M.D. Sass Investors Services Inc., New York, was terminated in the move.

Shearson Asset Management Inc., New York, was among the three firms terminated, an official there confirmed. Sources said Stein Roe & Farnham, Chicago, also was dropped, but a company spokesman refused to comment.

The restructuring represents a change in strategy; previously, the fund's managers all were believed to be balanced.

Sources said the restructuring affects the union's two largest (of three) retirement plans — the pension fund and annuity fund.

Thomas L. Pulling, chairman of Shearson's investment management unit, said his firm will be terminated effective June 30 in a move that "had nothing to do with performance."

"Our performance was first class. I would have to assume (the termination) was because of the circumstances cited in the article" (*Pensions & Investment Age*, April 28).

The article detailed a dispute between the national Carpenters' union in Washington and American Express Co., the New York-based parent of Shearson.

The union charged that American Express built a credit card facility in Greensboro, N.C., without allowing union contractors to bid for the job. Patrick J. Campbell, general president of the union, had urged local union pension funds to avoid using the services of American Express Co. and its subsidiaries.

Pension fund officials were assisted in the restructuring by Investment Performance Services Inc., Savannah, Ga. Herbert Skinner Jr., a principal, referred all questions to the fund trustees. ■

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Master trust

Profiles of U.S. banks with master trust and custodial assets of $1 billion or more begin on page 24.

Master trust use on rise

Major trustee banks' share of market stays steady

By Trudy Ring

More pension funds than ever are using master trustees, while major master trust banks' share of the market is holding just about steady.

In addition, most pension sponsors are paying their master trust fees from plan assets rather than from corporate coffers, and few are paying in soft dollars.

In 1985, 70% of pension funds with assets of $10 million or more had a master trustee, according to Greenwich Associates, Greenwich, Conn. The firm interviewed more than 10,000 companies in October, said Rodger Smith, partner.

The percentage has grown each year since the beginning of the decade. It was 66% in 1984, 64% in 1983, 57% in 1982, 54% in 1981 and 49% in 1980, Mr. Smith said. "Clearly, the total use has been growing as the complexity of pension funds has been increasing," he said.

The use of master trustees is most prevalent among the largest funds. In 1985, 89% of funds with assets of more than $1 billion used a master trustee, Mr. Smith said.

Among other fund sizes, the percentage using master trustees was:

$501 mil. — $1 bil.	86%
251 — 500 mil.	84
201 — 250 mil.	81
151 — 200 mil.	77
101 — 150 mil.	64
51 — 100 mil.	61
41 — 50 mil.	53
31 — 40 mil.	52
21 — 30 mil.	60
20 mil. or less	58

Also, among the top 200 of the Fortune 500 companies, regardless of pension fund size, 90% use a master trustee, Mr. Smith said.

The banks with the biggest share of U.S. master trust business are mostly those that held that distinction last year, according to a *Pensions & Investment Age* survey. Among the 30 responding to the survey, the biggest market shares were held by Bankers Trust Co., New York, with 13.5%; Northern Trust Co., Chicago, and Mellon Bank, Pittsburgh, each with 10.4%; Chase Manhattan Bank, New York, with 10.2%; and State Street Bank and Trust Co., Boston, with 8.2%.

The banks reported master trust assets as of March 31 and any change from a year before. *P&I Age* calculated market shares from those figures.

Among those with the biggest market shares, the only one with a major shift in its share was Chase Manhattan. Its share in 1985 was 12.6%. Its master trust assets increased $2 billion, or 3.7%, to $56 billion, but the increase failed to keep pace with the overall market. Chase Manhattan officials said there was no simple explanation for the change.

Among those with the smaller market shares, the biggest shift was recorded by Bank of New York, whose share increased to 4.8% from 3.4%.

Other master trustees had market share shifts of less than one percentage point.

The only survey respondent with an actual drop in master trust assets was Continental Illinois National Bank & Trust Co., Chicago, with a 4.9% decrease to $10.8 billion.

In U.S. master custody, the biggest market shares were held by State Street Bank, with 17.8%; Chase Manhattan, 13.3%; Citibank, New York, 11.8%; Northern Trust, 9.5%; and Irving Trust Co., New York, 8.4%.

State Street Bank and Northern Trust both experienced jumps in market share. State Street Bank's 1985 share was 13.2% and Northern Trust's was 6.3%. Chase Manhattan, as with master trust, had a drop in master custody market share even though its assets increased slightly. Its 1985 master custody market share was 18.8%.

"We had a tremendous amount of new business in the public funds area," said Ronald Golz, executive vice president of State Street Bank. "We also had some good success with endowments and union funds." For all those types of funds, the legal trusteeship must remain with the institution, so the bank is a master custodian rather than master trustee.

Among smaller master custody players, one with a major change in market share was Mellon Bank, whose share increased to 1.5% from 0.2%. Master custodial assets increased more than nine-fold, to $5.7 billion from $600 million. That was primarily because of one

Continued on page 39

U.S. master trust/master custody banks ($ millions)

Rank	Bank	Total	Master trust assets	Master custodial assets
1.	State Street Bank & Trust Co.	$110,276	$44,839	$65,437
2.	Chase Manhattan Bank	105,000	56,000	49,000
3.	Northern Trust Co.	92,082	57,091	34,991
4.	Bankers Trust	90,500	74,000	16,500
5.	Citibank	67,800	24,200	43,600
6.	Mellon Bank	57,500	51,800	5,700
7.	Bank of New York	44,300	26,200	18,100
8.	Irving Trust Co.	43,000	12,000	31,000
9.	Boston Safe Deposit and Trust	33,873	26,191	5,682
10.	Harris Trust and Savings	32,225	25,961	6,264
11.	RepublicBank Dallas-Houston	27,900	17,900	10,000
12.	Manufacturers Hanover Trust	26,760	18,780	7,980
13.	First Pennsylvania Bank	23,800	2,000	21,800
14.	National Bank of Detroit	21,500	11,600	9,900
15.	Wachovia Bank and Trust Co.	21,500	20,400	1,100
16.	U.S. Trust Co. of New York	17,000	11,000	6,000
17.	Bank of America	13,931	10,970	2,961
18.	Manufacturers National, Detroit	13,800	11,400	2,400
19.	Continental Illinois	12,953	10,839	2,114
20.	Wilmington Trust Co.	10,978	10,978	0
21.	Citizens and Southern	8,571	1,043	7,528
22.	AmeriTrust Co.	5,600	3,500	2,100
23.	Mercantile-Safe Deposit	4,100	2,200	1,900
24.	First Trust Co., St. Paul	3,650	3,000	650
25.	Marshall & Ilsley Trust Co.	3,500	1,700	1,800
26.	Centerre Trust Co.	3,345	1,565	1,780
27.	First Wisconsin Trust Co.	3,102	1,871	1,231
28.	Norwest Bank, Minneapolis	2,600	2,000	600
29.	Marine Midland Bank	1,533	1,200	333
30.	Trust Co. Bank	1,150	450	700
	TOTAL	$809,829	$544,698	$265,131

Source: *Pensions & Investment Age*

Services receive high marks from corporate pension chiefs

By Carol Wiley

Corporate pension executives seem satisfied with their master trustee banks, rating them quite highly in personnel, cash management, performance measurement, reporting and other master trust services, a *Pensions & Investment Age* survey shows.

More than 130 corporate pension executives responded to the survey of master trust services. Executives anonymously rated their master trust banks in five categories on a scale of 1 (poor) to 5 (excellent). Only three of the 31 banks rated by the respondents fell below the mean of 2.5, indicating a general satisfaction with the master trust relationship.

All master trust banks rated by three or more corporate pension executives received ratings of 2.9 or better.

Master trust banks receiving ratings of 4 or higher in overall performance are Boston Safe Deposit & Trust; National Bank of Detroit; Mellon Bank, Pittsburgh; Harris Trust and Savings Bank, Chicago; and First Trust Co. of St. Paul.

First Alabama Bank (Merchants National), Mobile; Norwest Bank Minneapolis; Bank of America, San Francisco; First Interstate Bank of Arizona, Tucson; and First Bank Duluth (Minn.) also received ratings of 4 or better. Each was rated by one manager.

Master trust banks receiving ratings of 2.9 or better in overall performance are, in descending order, The Northern Trust Co., Chicago; RepublicBank Dallas, State Street Bank & Trust Co., Boston; Bankers Trust Co., New York; Chase Manhattan Bank, New York; Wachovia Bank & Trust Co., Winston-Salem, N.C.; Irving Trust Co., New York; Citibank, New York; and Manufacturers Hanover Trust, New York. (A table with the full ratings appears on page 40.)

Banks rated highly by fewer than three corporate pension executives include Bank of New York; United Missouri Bank, Kansas City; Idaho First National Bank, Boise; Connecticut National Bank, Hartford; Valley National Bank, Phoenix; Mercantile-Safe Deposit & Trust Co., Baltimore;

Continued on page 40

Master trust banks ranked by corporate pension executives

Rank	Bank	Rating	No. of Responses*
1.	Boston Safe Deposit and Trust	4.5	6
2.	National Bank of Detroit	4.3	4
3.	Mellon Bank	4.1	11
4.	Harris Trust and Savings	4.0	7
5.	First Trust Co., St. Paul	4.0	3
6.	Northern Trust Co.	3.8	21
7.	RepublicBank Dallas	3.8	9
8.	State Street Bank & Trust Co.	3.7	12
9.	Bankers Trust	3.6	19
10.	Chase Manhattan Bank	3.6	10
11.	Wachovia Bank and Trust Co.	3.6	7
12.	Irving Trust Co.	3.4	5
13.	Citibank	3.0	3
14.	Manufacturers Hanover Trust	2.9	3

*does not include banks with fewer than three respondents

Source: *Pensions & Investment Age*

Money managers echo feelings of satisfaction

Money managers, like pension fund executives, appear satisfied in their dealings with master trust banks.

In a survey that drew 50 responses, managers rated master trust banks in eight categories on a scale of 1 to 5, with 1 being poor and 5 being excellent. Only three of the 34 banks rated received a rating of less than 3, indicating a general satisfaction with services from master trust banks.

The eight categories are security clearance; keeping managers up-to-date on cash and transaction activity; automatically investing cash balances; prompt crediting of cash (principal and income); reporting accuracy; capabilities of account representative; cooperativeness of the institution; and an overall rating.

Of banks rated by at least three respondents, the highest overall score went to Harris Trust and Savings Bank, Chicago, which received a composite rating of 4.4 from 18 money managers.

Other banks in the top five included Citizens & Southern National Bank, Atlanta, with a score of 4.3 from six respondents, and M&I Marshall & Ilsley Bank, Milwaukee, rated 4 by three managers. Wilmington Trust Co., Wilmington, Del., and Bank of New York tied for fourth place with scores of 4.1. Wilmington Trust was rated by seven managers and Bank of New York by 17.

In fifth place was a four-way tie of AmeriTrust Co., Cleveland; Boston Safe Deposit & Trust Co.; Centerre Trust Co. of St. Louis; and Manufacturers National Bank of Detroit, all with ratings of 4. AmeriTrust was rated by 10 managers, Boston Safe Deposit by 20, Centerre by eight and Manufacturers Detroit by five.

Bank of Oklahoma, Tulsa, received the highest overall score — 4.7 — but was only rated by one manager. First Wisconsin Trust Co., Milwaukee, rated by two managers, and Rainier National Bank, Seattle, rated by one manager, were rated 4 overall.

Two banks received overall ratings of less than 3. They were First City National Bank of Houston, 2.6, rated by five managers, and Continental Illinois National Bank & Trust Co., Chicago, 2.9, rated by 10 managers.

None of the 50 managers ranked First National Bank of Atlanta or Winters National Bank & Trust Co., Dayton, Ohio.

(To see how the money managers rated all of the master trust banks in the survey in overall performance, see chart on page 40.)

Continued on page 40

a

AmeriTrust Co.

900 Euclid Ave., Cleveland, Ohio 44101; (216) 687-4089

Master trust assets	$3,500,000,000
Master custodial assets	$2,100,000,000
Master trust clients	41
Master custodial clients	15
Account supervisors	2

AmeriTrust Co. gained $618 million from last year in master trust assets. Master custodial assets increased $406 million.

The size of the smallest master trust client is $1 million; the largest is $456 million.

The primary accounting method used is settlement date with trade date reporting.

Basic master trust services include automated cash management system, pension/benefit payments, securities processing, performance measurement and custody services. Optional services include TUCS (performance measurement reports) and AmeriScan (on-line client inquiry).

Asset and liability and monthly transaction reports are delivered to clients five days after the end of a period. Performance measurement reports are delivered in 15 days. The transaction reports and asset and liability reports are available on-line.

New features include a pension payment system, trade date reporting and on-line client inquiry through the client's personal computer.

Fees are based on market value of assets and on individual services provided.

The client contact is Gary W. Queen.

International money managers will be profiled in the Aug. 4 *Pensions & Investment Age*.

b

Bank of America

555 California St., San Francisco, Calif. 94104; (415) 622-9568

Master trust assets	$10,970,000,000
Master custodial assets	$2,961,000,000
Master trust clients	25
Master custodial clients	13
Account supervisors	19

Bank of America's master trust assets increased $700 million from last year.

The size of the smallest master trust client is $23 million; the largest is $5.6 billion.

The primary accounting method used is accrual, but cash, modified cash, trade or settlement date, income-only accruals and book value also are offered.

Basic master trust services include accounting and reporting, cash management, pension disbursements and securities transactions. Optional services include participant record keeping, securities lending, performance measurement and analytics and global custody.

Monthly transaction and asset and liability reports are delivered to clients five to 10 business days after the end of the period. Performance measurement reports are delivered in six business days. Securities lending and performance measurement reports are available on-line. By the third quarter, all reports will be available on-line.

New features include conversion to an on-line, real-time system by mid-year. A global custody system has been installed.

Fees are based on percentage of assets, portfolio structure and transactions.

Client contact is John P. Sheehy, senior vice president.

Cash management survey: Oct. 27.

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THE BANK OF NEW YORK MASTER TRUST

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017; (212) 850-2089

Master trust assets	$74,000,000,000
Master custodial assets	$16,500,000,000
Master trust clients	122
Master custodial clients	25
Account supervisors	38

Bankers Trust's master trust assets increased $18.4 billion from last year; master custodial assets were up $7.7 billion.

The size of the smallest master trust account is $1 million; the largest is $9 billion.

Trade date, fully accrued, is the primary accounting system. Settlement date accounting also is available.

Basic master trust services include custody, accounting, reporting and cash management. Optional services include benefit payments; securities lending; global custody; performance measurement; on-line inquiry; investment products and customized reporting.

Monthly transaction reports are available within three days after the end of the period; asset and liability reports, seven to 10 business days; and performance measurement reports, three weeks. All reports are available on-line.

New features include Dividend Plus, which captures cash differential derived from the discounts offered to investors on corporate dividend reinvestment plans; BT Cap, which allows investment managers to administer the assets of multiple clients in one consolidated portfolio and to use the firm's products; on-line benefit payments, and STIF Plus.

Accounting and reporting fees are charged per portfolio; transaction fees for directed trades; and administration charges are based on the size and complexity of the total relationship.

The client contact is Carter P. Reynolds, vice president.

Bank of New York

48 Wall St., New York, N.Y. 10015; (212) 530-1784

Master trust assets	$26,200,000,000
Master custodial assets	$18,100,000,000
Master trust clients	66
Master custodial clients	13
Account supervisors	12

Bank of New York's master trust assets were up $11.5 billion from last year; master custodial assets increased $8.5 billion.

The size of the smallest master trust client is $5 million; the largest is $12 billion.

Accounting methods used include trade date, settlement date, cash basis, modified cash basis, combination basis, full accrual, amortized cost/accumulation and liability accounting.

Basic master trust services include full administrative services, accounting reports, cash management, ERISA reporting, portfolio review, fail float protection, options and futures accounting and on-line inquiry. Optional services include performance measurement, securities lending, benefit payments, consulting services, global custody, daily unit valuations and on-line inquiry with two-way communication.

Reports are delivered within three to five days after the end of the period.

Performance measurement and asset and liability reports are available on-line.

Fees are based on a percentage of market value.

The client contact is Roy Lanza, vice president.

Boston Safe Deposit and Trust Co.

1 Boston Place, Boston, Mass. 02106; (617) 722-7457

Master trust assets	$28,191,000,000
Master custodial assets	$5,682,000,000
Master trust clients	37
Master custodial clients	14
Account supervisors	13

Boston Safe Deposit and Trust Co.'s master trust assets increased $7.2 billion from last year; master custodial assets decreased $65 million, attributed to a change in the market value

of one client's assets.

The size of the smallest master trust client is $23 million; the largest is $6.1 billion.

The primary accounting method used is a true trade date, full accrual system. Accounting systems also interface daily with a cash basis securities control system.

Basic master trust services are safekeeping of assets; full accrual; trade date-based accounting and reporting and cash management. Optional services include performance measurement and analysis; securities lending; global custody; benefit payments; participant record keeping; consulting services; structured investment products; on-line access capabilities; and personal computer workstation.

Monthly transaction and asset and liability reports are delivered to clients five days after the end of a period; performance measurement reports are delivered in seven days. All reporting information is available on-line.

New features include structured investment products, personal computer workstation and a national FSI PLUS payment system.

Fees are calculated on an individual basis, depending on the services required.

The client contact is Martina Millot.

C

Canada Trust Co.

320 Bay St., Toronto, Ontario M5H 2P6; (416) 361-8248

Master trust assets	$3,579,000,000(U.S.)
Master trust clients	120

Master trust assets for Canada Trust Co. reflect the results of a Dec. 31 merger with Canada Permanent Trust Co.

The size of the smallest master trust client is $1 million; the largest is $358 million. All assets are in U.S. dollars.

The primary accounting method used is full accrual/contract. Settlement for trades also is offered.

Basic master trust services include all standard accounting and reporting services. Optional services include custom STIF, downloading, client access/data entry and performance measurement.

Monthly transaction reports and asset and liability reports are available five to 10 business days after the end of a period. Performance measurement reports are available six weeks after the end of a period. All are available on-line.

Fees are calculated on book value and transaction fees.

The client contact is R. LaForce, vice president-business development.

Centerre Trust Co.

510 Locust St., St. Louis, Mo. 63101; (314) 436-9132

Master trust assets	$1,585,000,000
Master custodial assets	$1,760,000,000
Master trust clients	7
Master custodial clients	5
Account supervisors	3

Centerre Trust's master trust assets increased $434 million from last year; master custodial assets were up $893 million.

The size of the smallest master trust account is $47.5 million; the largest is $569.9 million.

The primary accounting method used is full accrual/trade date accounting. Other methods offered are cash basis/settlement date accounting.

Basic master trust services include comprehensive monthly trust accounting at the money manager plan and master trust level; performance measurement; benefit payment processing and related tax reporting; option accounting; fail float; automatic money market sweep and participant record keeping services for defined contribution plans.

Optional services are securities lending and customized performance analytics.

Monthly transaction reports are delivered three to five business days after the end of a period; asset and liability reports are delivered in five to seven business days, and performance measurement reports in 15 days. Transaction and asset reports are available on-line.

New features include fully indemnified securities lending and a commingled real estate fund.

Fees are based on a combination of market value and the number of managers, plans and unitized funds.

The client contact is Richard Hibbs.

Chase Manhattan Bank

1211 Avenue of the Americas, New York, N.Y. 10036; (212) 730-3008

Master trust assets	$56,000,000,000
Master custodial assets	$49,000,000,000
Master trust clients	80
Master custodial clients	18
Account supervisors	35

Chase Manhattan Bank's master trust assets increased $2 billion from last year's; master custodial assets were up $2 billion.

The size of the smallest master trust account is $1 million; the largest is $15 billion.

The primary accounting method used is trade date with full accruals. Settlement date accounting also is offered.

Basic master trust services include on-line accounting and reporting systems, safekeeping, custody accounting, cash management, performance measurement, portfolio analysis index funds, futures/options accounting, ERISA and FASB reporting, securities lending and benefit disbursements. Optional services include performance measurement, comparative performance evaluation services, portfolio analysis systems, global performance measurement and consulting.

Monthly transaction and asset and liability reports are delivered the day following the end of the period. Performance measurement reports are delivered to the client in 10 business days. All reports are available on-line.

New features include inquiry, account maintenance, pricing, income audit, accruals, accounting, market valuations, allocation processing, cash projection and asset proof and control, all available daily; off-cycle accounting and reporting; flexible reporting formats; and off-cycle allocations processing.

Fees are based on the asset value of the account, as well as the structure and transaction volume.

The client contact is John A. Sweeney, vice president.

Citibank

1 Citicorp Center, 153 E. 53rd St., New York, N.Y. 10043; (212) 559-1523

Master trust assets	$24,200,000,000
Master custodial assets	$43,600,000,000
Master trust clients	130
Master custodial clients	67
Account supervisors	26

Citibank's master trust assets increased $8 billion from last year; master custodial assets were up $12.5 billion.

The size of the smallest master trust client is $1 million; the largest is $3.2 billion.

The primary accounting method used is trade date; settlement date also is offered.

Basic master trust services include safekeeping and custody; cash management; trade date reporting; ERISA reports; equitable share accounting; benefit disbursement; and on-line information systems. Optional services include flexible reporting; performance measurement and analysis; TUCS comparisons; global custody; securities lending; participant record keeping and DRIP service.

Transaction reports are delivered three business days after the end of the month. Asset and liability reports are available five to seven business days after receipt of all information and performance measurement reports are delivered in 15 business days. Transaction and asset reports are available on-line.

New features include the Citicorp Portfolio Analyst for on-line flexible

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reporting and graphics.

Fees are based on individual services.

The client contact is Gregory J. di Pretoro.

The Citizens and Southern National Bank

33 North Ave. N.E., Atlanta, Ga. 30308; (404) 897-3083

Master trust assets	$1,043,000,000
Master custodial assets	$7,528,000,000
Master trust clients	39
Master custodial clients	6
Account supervisors	15

Citizens and Southern experienced a gain of $60 million in master trust assets from last year. Master custodial assets increased $1 billion.

The size of the smallest master trust client is $20 million; the largest is $100 million.

The primary accounting method is accrual, trade date. Asset valuations and transaction statements reflect pending transactions, and accrued interest and dividend income are reported on an accrual basis.

Basic master trust services include custody of assets; collection of any dividend or interest income; cash management; record maintenance; production of required statements; on-line access to trust accounting; periodic review of administrative matters and investments; personal contact with a certified employee benefit specialist; direction from authorized investment managers; and participant record keeping.

Optional services include international securities; options and futures; performance measurement; TUCS on-line; seminars; bulletins; legislative and regulatory affairs department; global custody; real estate services; multicurrency accounting; and on-line access to the trust accounting system.

Monthly transaction and asset reports are available within five business days after the end of a period; performance measurement reports are delivered within 10 days. All reports are available on-line.

New features include on-line order entry for investment managers; down load capability; ticker symbol entry; performance attribution; on-line access to several systems; and integration of multicurrency accounting.

Fees are based on market value of assets and individual services provided.

The client contact is Edgar R. Smith, vice president.

Continental Illinois National Bank & Trust Co.

231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-2345

Master trust assets	$10,839,000,000
Master custodial assets	$2,114,000,000
Master trust clients	47
Master custodial clients	7
Account supervisors	17

Continental Illinois National Bank & Trust Co.'s master trust assets decreased $561 million from last year; master custodial assets decreased $314 million.

The size of the smallest master trust client is $8 million; the largest is $2.5 billion.

Trade date and settlement date accounting are available.

Basic master trust services include consolidated accounting (plan and managers); performance measurement; dial-up access via a remote information system; account relationship-manager; automated cash management; full global custodian network with multicurrency reporting capabilities; full fail float protection; electronic mail system; legal administrative guidance; benefit disbursing; participant record keeping; securities lending; ERISA reporting; customized reporting; option and futures processing and cash projections. An officer and administrative assistants are assigned to an account on a full-time basis.

Reports to clients are delivered five to 10 days after the end of the period. Transaction, asset and performance measurement reports are available on-line.

New features include downloading of client data.

Fees are primarily asset based with some transactional pricing.

The client contact is Christopher Ross, vice president.

f

First Pennsylvania Bank

15th and Chestnut Sts., Philadelphia, Pa. 19101; (215) 786-7946

Master trust assets	$3,000,000,000
Master custodial assets	$21,800,000,000
Master trust clients	15
Master custodial clients	14
Account supervisors	7

First Pennsylvania Bank's master trust assets increased $333 million from last year; master custodial assets were up $5 billion.

The size of the smallest master trust client is $1.5 million; the largest is $663 million.

The primary accounting method used is cash basis, but accrual basis accounting also is offered.

Basic master trust services include cash basis reporting; securities movement and control; income collection; and client terminal. Optional services include performance comparison; performance measurement; accrual accounting; participant record keeping; pension payroll; cash management; securities lending; global custody; portfolio analytics; and fail float.

Transaction and asset and liability reports are available five to seven business days after the end of a period. Performance measurement reports are delivered in 10 to 15 business days. All reports, as well as cash projection reports, are available on-line.

A new feature is global custody.

Fees are based on market value, security transaction volume, the number of accounts using specific services, accrual accounting, TUCS, performance measurement, pension payroll and participant record keeping. Securities lending is based on the percentage of net securities lending revenue.

The client contact is James F. McHale.

First Trust Co. Inc.

180 E. Fifth St., St. Paul, Minn. 55101; (612) 223-7422

Master trust assets	$3,000,000,000
Master custodial assets	$650,000,000
Master trust clients	17
Master custodial clients	7
Account supervisors	12

First Trust Co.'s master trust assets were up $800 million from last year; master custodial assets increased $150 million.

The size of the smallest master trust account is $16 million; the largest, $1.8 billion.

Trade date is the primary accounting method used; settlement date accounting also is offered.

Basic master trust services include securities settlement; custody and servicing; full accrual accounting; automated cash management; portfolio review; performance measurement; ERISA reporting; and benefit disbursement. Optional services include TUCS; securities lending; participant accounting; index fund; and customer on-line service.

Transaction reports are available the day after the month's end. Asset and liability reports are available in 10 business days and performance measurement reports in 15 business days. Reports available on-line include TUCS performance; asset reports with current market value; cash balances; pending transactions and transaction histories and benefit disbursing. On-line capability includes inquiry and data input.

By midyear, First Trust customers will be able to access an inquiry system using a fourth-generation language via remote log-on. The menu-driven system can be downloaded to a

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- Global Custody
- Performance Analytics
- Trust Universe Comparison Service®
- Options/Futures Administration
- Plan Sponsor On-line
- Client Seminars
- 401(k) Administration
- Real Estate Management
- Venture Capital Management
- PAYSOP Administration
- Legal Administration

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For more information, call Jane Fisher, VP, (919) 748-6348.

transaction.

The client contact is William D. Bensman, vice president.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., P.O. Box 2054, Milwaukee, Wis. 53201; (414) 765-5000

Master trust assets	$1,871,000,000
Master custodial assets	$1,231,000,000
Master trust clients	30
Master custodial clients	3
Account supervisors	6

First Wisconsin Trust Co. increased its master trust assets $360 million from last year; master custodial assets were up $285 million. (The figures are as of Dec. 31.)

The size of the smallest master trust client is $3 million; the largest, $1.1 billion.

The primary accounting method is trade date with full accruals.

Master trust services include plan accounting, care and custody of assets, transaction processing, cash management, accounting statements and investment reviews. Optional services are on-line access, performance measurement, securities lending and benefit payments.

Transaction reports are available two to three business days after the end of the month. Asset reports are delivered within seven to nine business days, and performance measurement reports, within 10 to 12 business days. Transaction and asset reports are available on-line.

New features include indexed investment products and on-line access.

Fees are based on market value and individual services used.

The client contact is Mark A. Kimla.

g

Guaranty Trust Co. of Canada

335 Bay St., Toronto, Ontario M5H 3N8; (416) 863-4966

Master trust assets	$291,000,000(U.S.)
Master trust clients	25
Account supervisors	6

Guaranty Trust Co. of Canada's master trust assets increased $89 million from last year. All amounts are in U.S. dollars.

The size of the smallest master trust client is $787,000; the largest is $184 million.

The primary accounting method used is settlement date; trade date also is offered.

Basic master trust services include income accruals; unitized accounting and consolidated reporting; cash management; portfolio analysis; report customization; legal administrative guidance; benefit disbursing; participant record keeping; securities lending; and options and futures processing.

Optional services include performance measurement.

Monthly transaction and asset and liability reports are available 10 business days after the end of a period. Performance measurement reports are available in 30 working days and are available on-line.

Basic fees are based on book value, plus account charges and check charges. Fees for managed assets are based on average market value and average book value.

The client contact is Doug Wannamaker, vice president-pensions.

h

Harris Trust and Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-7625

Master trust assets	$25,961,000,000
Master custodial assets	$6,264,000,000
Master trust clients	51
Master custodial clients	72
Account supervisors	8

Harris Trust and Savings Bank's master trust assets increased almost $6 billion from last year; master custodial assets were up about $3.1 billion.

The size of the smallest master trust client is $11.4 million; the largest is $7.84 billion.

Contractual settlement date is the primary accounting method used. Cash/settlement date and accrual/trade date also are offered.

Basic master trust services include investment manager relations; cash management; reporting and accounting; performance measurement; benefit disbursements; and global custody. Optional services include customized reporting; securities lending; defined contribution services; systematic equity management; portfolio analysis; and on-line computer access.

Transaction reports are available two to three business days after the end of the month. Asset and performance measurement reports are available three to seven business days after the end of a period. Reports available on-line include asset, transaction, short-term investment position, broker commission and market change.

New features include on-line performance data.

Fee calculations are based on market value and individual services.

The client contact is Walter J. Kowalczyk.

i

International Trust Co.

Royal Bank Plaza, North Tower, P.O. Box 75, Toronto, Ontario M5J 2J2; (416) 865-0515

Master trust assets	$1,933,000,000(U.S.)
Master trust clients	18
Account supervisors	4

International Trust Co.'s master trust assets increased $1.1 billion from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $2.1 million; the largest is $573 million.

Settlement date accounting is the primary method used. Trade date accounting also is offered.

Basic master trust services include trusteeship; custodian; collection of income; settled trades; asset valuation; and full plan accounting. Optional services include STIF; securities lending; participant record keeping; various pooled funds; and global services.

Transaction reports are available the first business day after the end of the month. Asset reports are available the sixth business day; performance measurement reports, the 10th day. All reports are available on-line.

New features include global and participant record keeping.

Fees vary according to client involvement.

The client contact is William Pascoe.

Irving Trust Co.

1 Wall St., New York, N.Y. 10015; (212) 635-1111

Master trust assets	$12,000,000,000
Master custodial assets	$31,000,000,000
Master trust clients	31
Master custodial clients	38
Account supervisors	18

Irving Trust Co.'s master trust assets increased $2 billion from last year; master custodial assets were up $6 billion.

The size of the smallest master trust client is $13.5 million; the largest, $4.5 billion.

Both trade date and settlement date accounting methods are offered.

Basic master trust services include transaction clearance; asset custody; custodized reporting; zero-balance cash management; fail float investment credit; and contractual settlement. Optional services include performance analytics and consulting; securities lending; global custody; spe-

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cialized STIF; passive bond fund; and on-line portfolio status.

All reports are available five days after the end of a period. All are available on-line.

New features include enhanced performance analytics reports and additional on-line reports.

Fees are based on transaction volume and market value.

The client contact is Gary L. Davenport, vice president.

m

Manufacturers Hanover Trust

530 Fifth Ave., New York, N.Y. 10036; (212) 819-1580

Master trust assets	$18,780,000,000
Master custodial assets	$7,980,000,000
Master trust clients	65
Master custodial clients	23
Account supervisors	16

Manufacturers Hanover Trust's master trust assets increased $2.78 billion from last year; master custodial assets were up $4.28 billion.

The size of the smallest master trust account is $5 million; the largest, $5.2 billion.

The primary accounting methods used are trade date and settlement date. Full accrual also is offered.

Basic master trust services include on-line access; administration; legal administrative guidance; master consolidation reporting; zero-balance cash management; benefit disbursing; participant record keeping; securities lending; global custody; performance measurement; investment manager consulting; portfolio analysis/comparison; customized reporting; fail float; options and futures processing; and ERISA reporting. Optional services are benefit payments and performance measurement.

Monthly transaction reports are available three days after the end of the period. Asset and liability reports are available within five days, and performance measurement reports are available one to two days after the asset reports. All reports are available on-line.

New features include a personal computer-based system for accessing the main frame computer and other outside data bases and enhancements to securities schedules, transaction reports, cycle processing, multicurrency accounting, trade date, expanded schedules, microfiche and personal computer compatibility.

Fees are based on a combination of asset values and individual services.

The client contact is Renee San Marco, vice president.

Manufacturers National Bank of Detroit

100 Renaissance Center, Sixth Floor, Detroit, Mich. 48243; (313) 222-4470

Master trust assets	$11,400,000,000
Master custodial assets	$2,400,000,000
Master trust clients	27
Master custodial clients	16
Account supervisors	4

Manufacturers National Bank of Detroit experienced an increase of $2.7 billion in master trust assets from last year. Master custodial assets were up $350 million.

The size of the smallest master trust account is $7.5 million; the largest is $10.6 billion.

The primary accounting method used is settlement date with trade date accruals.

Basic master trust services offered include unitized accounting; cash management; consolidated reporting; and performance measurement reporting. Optional services include securities lending and on-line computer terminals at the customers' locations.

Transaction and asset reports are available five business days after the end of a period. Performance measurement reports are available 15 business days from the end of each month for standard reports and 45 business days from the end of the quarter for TUCS reports. All reports are available on-line.

New features include global custody and portfolio analysis.

Fees are based on the number of investment managers, market value, the number of issues held and activity.

The client contact is Andrea E. Zeme.

Marine Midland Bank

250 Park Ave., New York, N.Y. 10177; (212) 503-2724

Master trust assets	$1,200,000,000
Master custodial assets	$300,000,000
Master trust clients	26
Master custodial clients	40
Account supervisors	8

Marine Midland Bank's master trust assets were up $250 million from last year; master custodial assets increased $50 million.

The size of the smallest master trust client is $1 million; the largest, $600 million.

Accrual is the primary accounting method used. Other methods offered include cash, modified cash and tax lot.

Basic master trust services include trusteeship; safekeeping; income collection; effecting corporate actions; accounting reports; cash management; and ERISA and FASB reports. Optional services include participant record keeping; benefit payments; performance measurement; investment management; and securities lending.

Transaction and asset reports are available five days after the end of a period. Performance measurement reports are available in 15 days. Pending trades, cash management information and asset lists are available on-line.

New features include the on-line inquiry system, "Trust Aid."

Fees are based on a combination of market value and complexity.

The client contact is Moira L. Patterson, assistant vice president.

Marshall & Ilsley Trust Co.

770 N. Water St., Milwaukee, Wis. 53202; (414) 765-8187

Master trust assets	$1,700,000,000
Master custodial assets	$1,800,000,000
Master trust clients	23
Master custodial clients	4
Account supervisors	9

Marshall & Ilsley Trust Co. experienced an increase in master trust assets of $500 million from last year. Master custodial assets increased $1.2 billion.

The size of the smallest master trust client is $3 million; the largest, $1.1 billion.

Accrual is the primary accounting method used.

Basic master trust services include performance measurement; participant record keeping; ERISA disclosure; benefit disbursement; and investment management. Optional services are reviewed with individual clients.

All reports are available to clients five to seven business days after the end of a period. All reports should be on-line by year end.

Fees are based on a combination of asset value and individual service.

The client contact is Morry L. Birnbaum.

Mellon Bank

1 Mellon Bank Center, Pittsburgh, Pa. 15258; (412) 234-5000

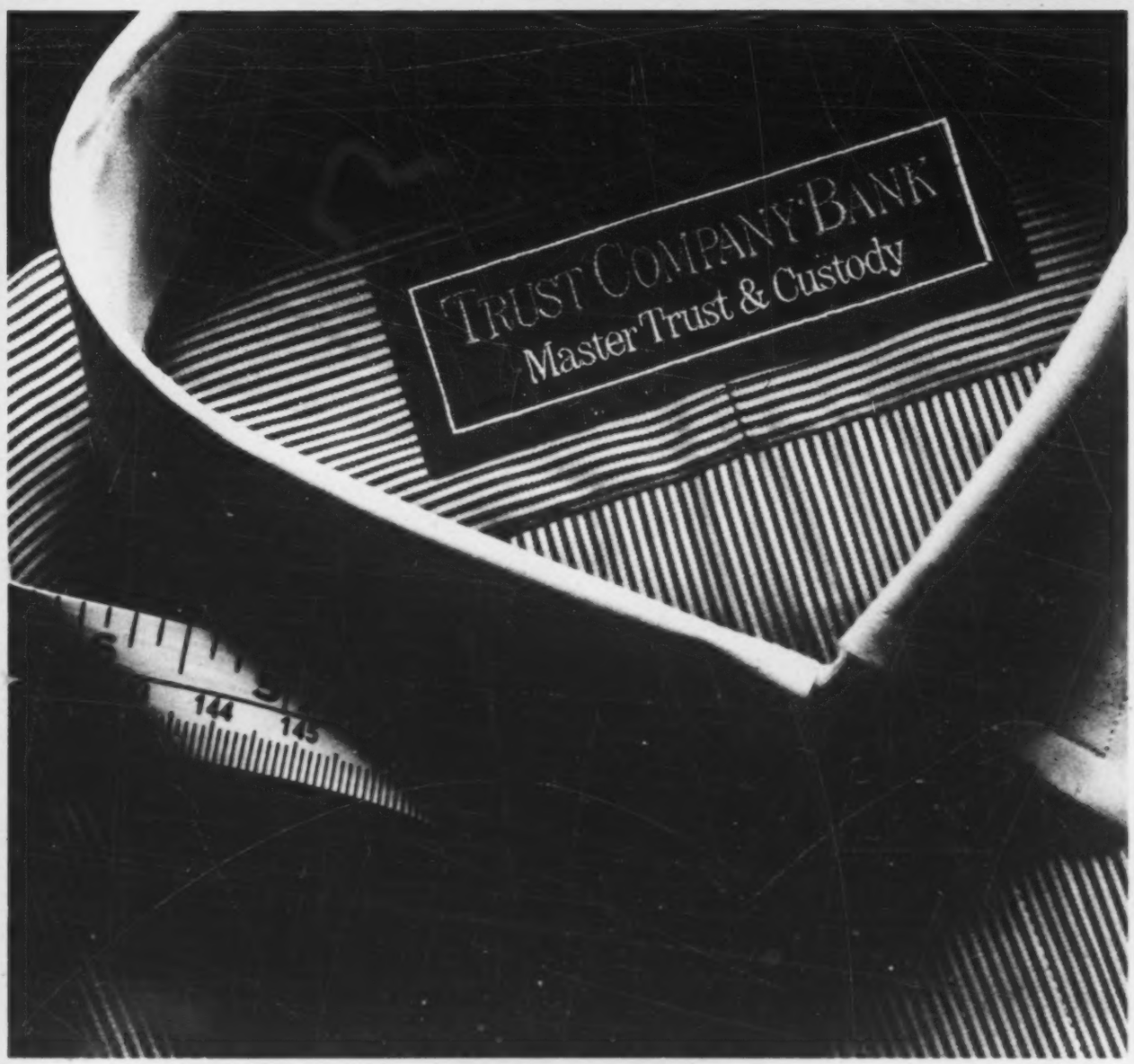
Master trust assets	$51,800,000,000
Master custodial assets	$5,700,000,000
Master trust clients	78
Master custodial clients	7
Account supervisors	8

Mellon Bank's master trust assets increased $7.8 billion from last year. Master custodial assets increased $5.1 billion.

The size of the smallest master trust client is $2 million; the largest, $8.5 billion.

The primary accounting method used is trade date, fully accrued. Cash accounting also is offered.

Basic master trust services include automated cash sweep; conversion; administration; cash management;



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accounting; and reporting. Optional services are securities lending; global custody; participant record keeping; pension disbursement; performance measurement; options and futures; and on-line service.

Transaction reports are available three business days after the end of the month. Asset reports are available three to five business days after the end of the period and performance measurement reports are available three to five weeks after the end of the period. 3-R's reports are available five business days after month's end. All reports are available on-line.

New features include report writing, on-line performance and analytics.

Fees are based on a combination of asset value, individual services and account activity.

The client contact is Gary A. Rothman.

Mercantile-Safe Deposit & Trust Co.

2 Hopkins Plaza, P.O. Box 2257, Baltimore, Md. 21203; (301) 237-5551

Master trust assets	$2,200,000,000
Master custodial assets	$1,900,000,000
Master trust clients	17
Master custodial clients	3
Account supervisors	5

Mercantile-Safe Deposit & Trust Co.'s master trust assets increased $400 million from last year; master custodial assets were up $300 million.

The size of the smallest master trust client is $2 million; the largest is $800 million.

Settlement date is the primary accounting method.

Basic master trust services include depository participation; benefit payments; option transactions; securities lending; cash management; investment analysis; investment performance measurement; ERISA reporting and brokerage reporting.

Hard-copy reports are delivered to clients in five to 10 business days.

New features include participant record keeping.

Fees are based on asset value and income collected.

The client contact is H. Louis French, vice president.

Montreal Trust

15 King St. W., Toronto, Ontario M5H 1B4; (416) 860-5848

Master trust assets	$3,722,000,000(U.S.)
Master trust clients	77
Account supervisors	10

Montreal Trust's master trust assets increased $1.43 billion from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $222,000; the largest is $608 million.

Settlement date is the primary accounting method used.

Basic master trust services include corporate trusteeship for consolidated pension fund; consolidated accounting; government reporting; automatic crediting and allocation of dividends, interest and capital gains; trust documentation; portfolio analysis and performance measurement; benefit payment services; securities lending; global custody; options processing; and on-line and microcomputer reporting.

Monthly transaction reports and asset and liability reports are available 10 business days after the end of a period. Performance measurement reports are available in 15 days. Basic accounting and portfolio data are available on-line.

New features include a short-term investment fund and an equity index fund.

Fees are based on average book value.

The client contact is Ken Neely, assistant vice president-corporate client services.

n

National Bank of Detroit

611 Woodward, Fifth Floor, Detroit, Mich. 48226; (313) 225-3900

Master trust assets	$11,800,000,000
Master custodial assets	$9,900,000,000
Master trust clients	67
Master custodial clients	27
Account supervisors	13

National Bank of Detroit's master trust assets increased $2.25 billion from last year; master custodial assets were up $1.15 billion.

The size of the smallest master trust account is $5.5 million.

Trade date and accrual are the primary accounting methods used. Clients also can review assets on a trade or settlement date basis.

Basic master trust services include guaranteed safekeeping; consolidated reporting; ERISA disclosure; STIF; and options and futures processing. Optional services include index funds; cash management; benefit disbursements; performance measurement; portfolio analytics; securities lending; global custody; on-line access to dedicated terminal or personal computer; and participant record keeping.

Monthly transaction reports and asset and liability reports are available five to seven business days after the end of a period. Performance measurement reports are available in 20 business days. All are available on-line.

New features include downloading of portfolio information to plan sponsor's personal computer.

Fees are based on asset market value and individual services.

The client contact is Clarence E. Kufel, vice president.

The National Trust Co.

21 King St. E., Toronto, Ontario M5C 1B3; (416) 361-3611

Master trust assets	$5,011,000,000(U.S.)
Master trust clients	95
Account supervisors	8

The National Trust Co.'s master trust assets increased $716 million from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $859,000; the largest is $1.9 billion.

Cash is the primary accounting method used. Accrual also is offered.

Basic master trust services include performance measurement; portfolio analysis and review; participant record keeping; securities lending; and benefit disbursements. Optional services include pooled and segregated investments.

Monthly transaction reports and asset and liability reports are available 10 days after the end of a period.

Performance measurement reports are available in 15 days. Monthly transaction reports and asset reports are available on-line.

New features include commission by broker; revised book value; and block trades.

Fees are based on book value and extra services.

The client contact is Michael How.

Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

Master trust assets	$57,091,000,000
Master custodial assets	$34,991,000,000
Master trust clients	148
Master custodial clients	49
Account supervisors	27

Northern Trust Co.'s master trust assets increased $10.1 billion from last year and master custodial assets, $19 billion.

The size of the smallest master trust client is $9.3 million; the largest, $5.1 billion.

The primary accounting methods used are settlement date and full accrual. Trade date reporting also is available.

Basic master trust services include custody; ERISA reporting; automated cash management; fail float analysis and credit; and tax lot accounting for endowments and foundations. Optional services include consulting services; equity and fixed-income index funds; dedicated and immunized bond funds; global custody; electronic delivery system; performance measurement; securities lending; benefit

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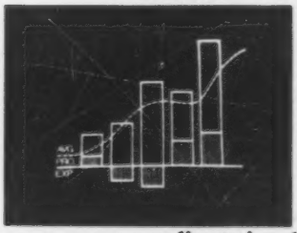

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disbursements; real estate sale-leasebacks; active asset management; options and futures accounting; plan accounting; and participant record keeping.

Transaction reports are available three business days after the end of the month; asset reports, five business days after the end of the period; and performance measurement reports, 19 to 25 business days. All accounting and performance analysis information is available on-line.

New features include electronic performance analysis service; portfolio insurance; dynamic risk management; S&P 500 futures arbitrage; South Africa-free equity fund; EAFE index fund; and transaction execution analysis reports.

Fees are based primarily on market value of assets.

The client contact is Thomas W. Kimen Jr.

Norwest Bank Minneapolis

8th and Marquette, Minneapolis, Minn. 55479; (612) 372-8017

Master trust assets	$2,000,000,000
Master custodial assets	$600,000,000
Master trust clients	22
Master custodial clients	3
Account supervisors	5

Norwest Bank Minneapolis' master trust assets were up $500 million from last year; master custodial assets increased $100 million.

The size of the smallest master trust client is $2 million; the largest, $550 million.

Dollar-base accounting is the primary method used. Unit base also is offered.

Basic master trust services include cash management; plan accounting; basic performance measurement; basic accounting reports; and consolidations. Optional services include performance measurement; TUCS; asset allocation; asset management; specialized accounting reports; and on-line access.

Monthly transaction reports and asset and liability reports are available 10 business days after the end of a period. Performance measurement reports are available in 15 business days. Transaction and asset reports are available on-line.

Fees are calculated on a combination of assets, transactions and specific charges.

The client contact is John Hale.

R

RepublicBank Dallas-Houston

P.O. Box 241, Dallas, Texas 75221; (214) 922-6506; P.O. Box 299, Houston, Texas (713) 243-6263

Master trust assets	$17,900,000,000
Master custodial assets	$10,000,000,000
Master trust clients	209
Master custodial clients	29
Account supervisors	14

RepublicBank's master trust assets increased $2.9 billion from last year; master custodial assets were up $3.15 billion.

The size of the smallest master trust client is $3 million; the largest is $5 billion.

Trade date full accrual is the primary accounting method used. Settlement date, cash or accrual basis accounting also are offered.

Basic master trust services include client on-line reporting; downloading and formatting capabilities; more than 150 accounting reports; global custody with multicurrency accounting; plan accounting; fail float earnings; pre-crediting dividends and interest on payable date in good funds; daily pricing; benefit payments; withholding and control disbursement; on-line performance measurement and analytics; and on-line DTC/ID securities processing.

Optional services include securities lending; 401(k) and ESOP record keeping with on-line inquiry; government reporting; stock and bond index funds; portfolio risk insurance; GIC wholesale service; dedicated bond portfolio; performance consulting; TUCS; transition manager service; futures and options; and international, real estate and energy investing.

Transaction reports are available two business days after the end of the month. Asset reports are available three to five business days after the end of a period and performance measurement reports, 20 days. All are available on-line with download capabilities.

New features include enhanced client on-line reports; on-line record keeping; risk portfolio protection, daily pricing; and futures.

Fees are based on a percentage of market value and transaction charges.

The client contact is David J. Pittman, senior vice president and director-trust corporate service marketing.

Royal Trust Corp. of Canada

P.O. Box 7500, Station A, Toronto, Ontario M5W 1P9; (416) 867-2021

Master trust assets	$12,016,000,000(U.S.)
Master trust clients	94
Account supervisors	13

Royal Trust Corp. of Canada's master trust assets rose $3.9 billion from last year. All figures are in U.S. dollars.

The size of the smallest master trust client is $71,580; the largest is $1.16 billion.

Settlement date is the primary accounting method used. Trade date reporting also is offered.

Basic master trust services include safekeeping of assets; check OREFT payment; corporate change and compliance monitoring; and basic performance measurement. Optional services include on-line inquiry; on-line data entry; securities lending; downloading; global custody; advanced performance measurement; and employee benefit record keeping.

Transaction reports are available five business days after the end of the month. Asset and performance measurement reports are available 10 business days after the end of a period. Transaction and asset reports are available on-line.

New features include downloading of reports.

Fees are based on book value of assets, security transactions and special features.

The client contact is M.F. Blakely.

S

State Street Bank & Trust

P.O. Box 1713, Boston, Mass. 02105; (617) 786-6353

Master trust assets	$44,839,000,000
Master custodial assets	$65,437,000,000
Master trust clients	104
Master custodial clients	72
Account supervisors	47

State Street Bank & Trust Co.'s master trust assets increased $6.82 billion from last year; master custodial assets grew $32.39 billion.

The size of the smallest master tru client is $3 million; the largest is $13 billion.

Accounting and record keeping a provided on a true trade date, fu accrual basis.

Basic master trust services inclu safekeeping of assets; cash manag ment through several short-ter investment vehicles; settlement ar control of all portfolio trades; corpora action monitoring; determination ar collection of income; cash availabili reporting; accounting for option futures and real estate; interactive ge eral ledger accounting; DTC and FE participation; on-line institutional de very system; daily, weekly or month valuation of assets; fiduciary contr plan accounting; 401(k) capabilitie benefit payments and participant re ord keeping; securities lending; and global custody network with multicu rency accounting.

Optional services are performanc measurement and analytics; on-li client services; benefit payments ar global custody.

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The client contacts are Mike Herlihy, vice president for corporate, union, endowment and foundation plans, and J.D. Nelson, vice president for public funds.

t

Trust Co. Bank

P.O. Box 4655, Atlanta, Ga. 30302; (404) 588-8097, master trust; (404) 588-7319, master custody

Master trust assets	$450,000,000
Master custodial assets	$700,000,000
Master trust clients	17
Master custodial clients	2
Account supervisors	6

Trust Co. Bank's master trust assets increased $75 million from last year; master custodial assets increased $100 million.

The size of the smallest master trust client is $5 million; the largest is $100 million.

The primary accounting methods used are contract and trade date.

Basic master trust services include safekeeping securities; trade settlement; securities lending; global custody; automated cash management; options and futures processing; performance measurement; ERISA reporting; trade date accounting; and processing benefit payments. Optional services include on-line inquiry; downloading portfolios; special reporting; and cash management consulting.

Transaction reports are available 10 to 15 business days after the end of the month. Asset and liability reports are available three days after the end of a period and performance measurement reports, 20 days. Asset reports are available on-line.

New features include securities lending, enhanced options processing and supplemental financial futures statements.

Fees are calculated on an individual basis, depending on services required.

The master trust client contact is James E. Arnett, group vice president. The master custody client contact is Paul L. Robertson III, assistant vice president.

u

U.S. Trust Co. of New York

45 Wall St., New York, N.Y. 10005; (212) 806-3834

Master trust assets	$11,000,000,000
Master custodial assets	$6,000,000,000
Master trust clients	75
Master custodial clients	91
Account supervisors	14

U.S. Trust Co. of New York's master trust assets increased $1.2 billion from last year; master custodial assets were up $1.5 billion.

The size of the smallest master trust client is $25 million; the largest is $2.5 billion.

Actual settlement date is the primary accounting method used. Trade date, contractual settlement or actual settlement date and pending addendum also are available.

Basic master trust services include trade processing; safekeeping; collection of dividends and interest; weekly and cumulative monthly statements; monthly valuations; and quarterly allocations and accountings.

Optional services include performance measurement; investment diagnostics; passive investment vehicle design; return optimizers; on-line cash management; customer accounting and valuations; off-site flexib report generation; global custody; be efit payments; amortization and accr tion schedules; customized reportin and securities lending. For sleepmasy aries, optional services also include ta accounting; collateralization for deb instruments; gift processing; feder and state regulatory reporting; ta preparation and donor record keeping

Monthly transaction reports are ava lable two business days after the en of the period. Asset and liability repor and performance measureme reports are available in seven to 1 business days, depending on requir ments.

Reports available on-line includ accountings; valuations; transactio and performance measurement.

New features include on-line perfo mance data and accounting, and flex ble report generator.

Fees are calculated on the numb of accounts, administration, asset siz and transactions.

Client contact is Robert Pagan vice president.

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W

Wachovia Bank and Trust

P.O. Box 3099, Winston-Salem, N.C. 27150; (919) 770-6348

Master trust assets	$20,400,000,0
Master custodial assets	$1,100,000,0
Master trust clients	
Master custodial clients	
Account supervisors	

Wachovia Bank and Trust Co. master trust assets increased $7. billion from last year; master custodi assets were up $522 million.

The size of the smallest master tru client is $8.3 million; the largest $6.7 billion.

Full accrual trade date adjuste accounting is the primary metho used. Cash accounting also is offered

Basic master trust services includ custody of assets; benefit payment ERISA reporting; cash managemen fail float analysis; monthly reportin plan accounting; on-line inquiry; an legal administrative guidance.

Optional services include securitie lending; global custody asset alloc tion; options and futures processin participant record keeping; perfo mance measurement; portfolio anal sis and comparative performance; an customized reporting.

Transaction reports are availabl three business days after the end the month. Asset reports are availabl 10 business days after the end of period and performance measureme reports, 12 business days. All a available on-line.

New features include client newsle ter; fixed principal (GIC) managemen enhanced on-line reporting; perfo mance consulting; on-line pensio payment system; and a short-ter investment fund accounting system.

Fees are based on a combination market value and specific service provided.

The client contact is Jane B. Fisher

Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-1723

Master trust assets	$10,978,000,0
Master trust clients	
Account supervisors	

Wilmington Trust Co.'s master tru assets increased $3.2 billion from la year.

The size of the smallest master tru client is $32 million; the largest, $10.1 billion.

The primary accounting method trade date, fully accrued. Contractu settlement date accounting also offered.

Basic master trust services includ custodial; cash management; maste trust reporting; on-line access; an options and futures processing Optional services include securitie lending; global custody; participan

Trust use . . .

Continued from page 23

large account, the more than $5 billion Howard Hughes Medical Institute, Bethesda, Md.

(*P&I Age* defines a master trust bank as one having trustee responsibilities for multiple plans with multiple managers, or a single plan with multiple managers. The master trust bank provides unitized reporting and accounting and other services, such as performance measurement. Master trust is used mostly for corporate employee benefit plans.

(The master custodian provides all of the services of a master trustee without legal trusteeship as, for example, in public employee plans or some endowments and foundations where legal trusteeship must remain within the institution.)

Among Canadian master trust banks, Royal Trust Corp. of Canada, Toronto, had 36% of the market share, with $8.6 billion in total master trust and master custodial assets. National Trust Co., Toronto, had 21%, with $5 billion. Montreal Trust, Toronto, retained its 16% market share, with $3.7 billion.

Canada Trust Co., which merged in December with Canada Permanent Trust Co., Toronto, had 15%, with $3.6 billion.

International Trust Co., Toronto, held an 8% market share, with $1.9 billion.

Guaranty Trust Co. of Canada, Toronto, retained is 4% market share, with $891 million.

All figures for Canadian master trust banks are reported in U.S. dollars. Market share comparisons for the Canadian banks could not be computed, because some of the figures used last year were reported in Canadian dollars.

P&I Age also surveyed pension fund executives about various aspects of their master trustee relationships. Of the 130 responding, the overwhelming majority pay master trust fees from plan assets. Only 31 use corporate dollars, while four use both pension and corporate assets.

This is in keeping with the growing tendency of pension funds to use plan assets to pay investment management fees (*P&I Age*, July 8). Corporate officers generally favor paying costs incurred in servicing the plan from the plan itself.

However, while fees for investment management — and brokerage — have come under pressure, there does not appear to be such pressure on master trust fees. Pension executives interviewed said they have negotiated satisfactory fees.

"When we first signed up with our master trustee, we negotiated what I think was a reasonable fee," said an official of Southwest Gas Corp., Las Vegas, Nev. First Interstate Bank of Arizona, Phoenix, is master trustee for the $40 million fund.

"We address the fees with Bankers Trust very carefully," said E.C. Ecker, pension investment officer for the $1 billion American Can Co. fund, Greenwich, Conn. "We have reviewed it periodically, and compared it to other master trustees, and we're quite satisfied."

"We felt we got a very competitive fee structure," said Joseph Jaeger, senior vice president-finance with California & Hawaiian Sugar Co., San Francisco, which hired Mellon Bank as master trustee for its $70 million fund last year. "We haven't tried to reduce it."

Few pension funds are using soft dollars to pay for master trust services, although the Department of Labor has opened this option to them. Of the 130 survey respondents, just 11 are using soft dollars. A few more, however, are considering it.

"We have sort of explored it, but we haven't really looked at it thoroughly," said Bill Conyer, director of finance administration at Illinois Power Co., Decatur, Ill., which has $200 million in pension assets. "We're interested, but I don't think there's anything imminent." Northern Trust is Illinois Power's master trustee.

Southwest Gas probably will look at soft-dollar arrangements for master trust, but the pension staff has reservations. "We don't like to restrict our investment managers to so many directed trades," the Southwest Gas official said. The fund now directs about half of its trades, and this generates enough soft dollars to pay its performance measurement consultant, SEI Funds Evaluation Services, Wayne, Pa., he said.

Polaroid Corp., Cambridge, Mass., occasionally pays master trust fees to U.S. Trust Co. of New York with soft dollars generated by its investment management subsidiary, Merganser Capital Management Corp., said Edward M. Safran, assistant treasurer.

"When our accounts generate soft dollars, it's our money, and we use it to reduce Polaroid's expenses," he said. "We don't see any advantage in creating more soft dollars, but the ones that we have, we use."

Another trend among pension funds is increasing use of global custody services, as more funds invest overseas. Securities must be safekept in the country in which they are traded.

About half of Northern Trust's 42 global custody clients have hired the firm in the past two years, said Jennifer Kamp Cameron, vice president. International investment, and therefore global custody, are expected to continue increasing, she said.

At the end of 1985, funds covered by the Employee Retirement Income Security Act had $27 billion invested outside the United States; a 40% growth rate is predicted over the next three years, Ms. Cameron said. Also, many public funds are looking at international investing, she said.

Robert Kay, a vice president at Chase Manhattan, agreed the demand for global custody is growing. "Those funds that have already placed funds overseas appear to be placing increasing amounts of dollars overseas," he said.

But this doesn't mean more banks are likely to enter the global custody marketplace, Mr. Kay said.

Just as with domestic master trust, clients are demanding increasingly sophisticated services, and the number of institutions able to provide these is small, he said.

"With the nature of the business and the demands for its complexity of service, I think we would see more people dropping out of the business rather than coming in," he said. ■

record keeping; pension disbursement; and investment and analytic services.

Transaction reports are available one business day after the end of the month. Asset reports are available in two business days after the end of the period and performance measurement reports, 12 days. Transaction and asset reports are available on-line.

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Money managers . . .

Overall rating of master trust banks by investment managers

Rank	Bank	Rating	No. of responses*
1.	Harris Trust and Savings	4.4	18
2.	Citizens and Southern	4.3	6
3.	Marshall & Ilsley Trust Co.	4.3	3
4.	Wilmington Trust Co.	4.1	7
5.	Bank of New York	4.1	17
6.	AmeriTrust Co.	4.0	10
7.	Boston Safe Deposit and Trust	4.0	20
8.	Centerre Trust Co.	4.0	8
9.	Manufacturers National, Detroit	4.0	5
10.	Citibank	3.9	27
11.	RepublicBank	3.8	14
12.	National Bank of Detroit	3.8	10
13.	Mercantile-Safe Deposit	3.8	6
14.	State Street Bank & Trust Co.	3.8	32
15.	First Pennsylvania Bank	3.7	6
16.	Norwest Bank, Minneapolis	3.7	6
17.	Mellon Bank	3.7	23
18.	Wachovia Bank and Trust Co.	3.7	20
19.	Marine Midland Bank	3.6	9
20.	Northern Trust Co.	3.6	29
21.	Irving Trust Co.	3.6	20
22.	Texas Commerce Bank	3.6	11
23.	U.S. Trust Co. of New York	3.5	16
24.	Manufacturers Hanover Trust	3.5	22
25.	Bankers Trust	3.5	26
26.	Chase Manhattan Bank	3.4	32
27.	First Trust Co., St. Paul	3.3	3
28.	Bank of America	3.2	14
29.	Continental Illinois	2.9	10
30.	First City National Bank	2.8	5

* does not include banks with fewer than three respondents

Source: *Pensions & Investment Age*

Continued from page 23

The top five master trust banks in each category — those receiving ratings of 4 or higher by three or more managers — are, in descending order as follows:

Security clearance: M&I, Citizens & Southern, Wilmington Trust and Harris Trust. AmeriTrust and Citibank, New York, tied for fifth place. M&I and Bank of Oklahoma rated by one manager, received perfect scores in this category. No bank scored below average.

Keeping managers up-to-date on cash and transaction activity: M&I, Harris Trust, Citibank, Wilmington Trust and Mellon Bank, Pittsburgh. Again, Bank of Oklahoma received a 5. All banks received ratings of 3 or higher in this category.

Automatically investing cash balances: M&I, Centerre Trust, Harris Trust, Manufacturers National Bank of Detroit and National Bank of Detroit.

Bank of Oklahoma again received a 5 in this category. All banks rated 3 or more here.

Prompt crediting of cash (principal and income): M&I (another 5), Harris Trust, AmeriTrust, Citizens & Southern and Norwest Bank Minneapolis.

Reporting accuracy: M&I, Manufacturers Detroit, Centerre, AmeriTrust and Wilmington Trust. Bank of Oklahoma again scored 5. First City National was rated 2.4 by five managers.

Capabilities of account representative: Harris Trust, Bank of New York, Citizens & Southern, AmeriTrust and Wilmington Trust.

Cooperativeness of the institution: Harris Trust, Wilmington Trust, Manufacturers Detroit and Citizens & Southern. AmeriTrust and Bank of New York tied for fifth place. Bank of Oklahoma scored 5.

The banks and the number of money managers that rated them are: Chase Manhattan Bank, New York, and State Street Bank & Trust Co., Boston, rated by 32 managers each; The Northern Trust Co., Chicago, 29 managers; Citibank, 27; Bankers Trust Co., New York, 26; Mellon Bank, 23; Manufacturers Hanover Trust, New York, 22; Boston Safe, Wachovia Bank & Trust Co., Winston-Salem, N.C., and Irving Trust Co., New York, 20 each; Harris Trust, 18; Bank of New York, 17; United States Trust Co. of New York, 16; Bank of America, San Francisco, and RepublicBank Dallas, 14 each; Texas Commerce Bank, Houston, 11; AmeriTrust, National Bank of Detroit and Continental Illinois, 10; Marine Midland, New York, nine; Centerre, eight; Wilmington Trust, seven; Citizens & Southern, Mercantile-Safe Deposit & Trust Co., Baltimore, First Pennsylvania Bank, Philadelphia, and Norwest Bank Minneapolis, six; First City National and Manufacturers Detroit, five; M&I and First Trust Co. of St. Paul, three; First Wisconsin, two; and Bank of Oklahoma and Rainier National Bank, one. Managers were asked to rate any and all master trust banks with which they had dealt. ■

Services receive high . . .

Continued from page 23

Provident National Bank, Cincinnati; Maryland National Bank, Baltimore.

Manufacturers National Bank of Detroit; Centerre Trust Co., St. Louis; and Bank IV Wichita (Kan.) fell below average in overall performance, with respective ratings of 2.3, 2.2 and 2.

Master trust banks also were rated in five categories of master trust services — personnel, cash management, performance measurement, reporting and other services (such as securities lending, consulting and on-line systems).

Most banks were rated 3 or higher in personnel, indicating general satisfaction with the bank's knowledge of financial markets, familiarity with client's needs, knowledge of bank operations, ability to get things done and turnover of personnel.

The top five banks in this category are Mellon, First Trust of St. Paul, Bank of New York, Boston Safe Deposit and Harris Trust.

First Alabama, rated by one respondent, received a perfect 5 in the personnel category.

Most banks also received high marks in the cash management category, where corporate pension executives rated the institutions according to fail balance earnings credit, speed in crediting cash, trustee's cash balance policy and trustee's investment of cash.

The top five banks in the cash management category are Boston Safe, Harris Trust, National Bank of Detroit, Mellon Bank and Northern Trust.

Connecticut National Bank and Norwest Bank Minneapolis, each rated by one respondent, received perfect scores in the cash management category. Bank IV Wichita, also rated by one executive, fell below average.

In the performance measurement category, First Trust, Boston Safe, National Bank of Detroit, Harris Trust and Northern Trust were the top rated. First Trust received a 5.

The banks were rated on format, flexibility, clarity, comprehensiveness, length of historical record and overall expertise. All but three banks were rated 3 or higher in this category. The three are Manufacturers Hanover, rated by three respondents, and Centerre Trust and Bank IV Wichita, both rated by one respondent.

In the reporting category, banks were rated according to report timing, consistency in meeting reporting deadlines, quality of reports, promptness at correcting errors, flexibility of reports, Employee Retirement Income Security Act reporting and ability to meet client's needs.

In the reporting category, Boston Safe, National Bank of Detroit, Harris Trust and Mellon Bank are the top four, with Bank of America, RepublicBank Dallas and Wachovia tied for fifth place.

Again, all but two banks — Bank IV Wichita and Centerre Trust — were rated above average.

In the other services category, every bank that offers a securities lending program received a high rating from clients. No bank was rated lower than 3, and most were rated between 4 and 5. The top rated here are Harris Trust, Boston Safe, Mellon Bank, Wachovia and Northern Trust.

The same was true in the consulting services category, where almost every bank that offers the service was rated highly. The top rated here are First Trust of St. Paul and RepublicBank Dallas, each with a rating of 5. Other banks highly regarded for consulting services include Bankers Trust, Boston Safe, Mellon Bank and Northern Trust.

Master trust banks with computer accessibility also appear to fare well in the eyes of clients. In this category, most banks once again rated above average.

Bank of New York, Boston Safe, Mellon Bank, Harris Trust and National Bank of Detroit were the top rated in systems capabilities, service orientation, on-line capabilities and commitment.

Rated below average in this category were Manufacturers National Bank of Detroit, Bank IV Wichita and Centerre Trust.

Corporate pension executives also were asked to characterize their trustee's fees as low, average or high. Of 130 respondents, five described their trustee's fees as low, four said they were high, and the remaining 121 characterized their trustee's fees as average. ■

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Canadian master trust banks (U.S. $ millions)

Rank	Bank	Master trust assets
1.	Royal Trust Corp. of Canada	$8,601
2.	National Trust Co.	5,011
3.	Montreal Trust	3,722
4.	Canada Trust Co.	3,579
5.	International Trust Co.	1,933
6.	Guaranty Trust Co. of Canada	891
	TOTAL	$23,737

Cash Management

Corporate cash is kept in internal staff hands

By Barry B. Burr

Corporations rarely hire money management firms to run any of their short-term investments, despite having hundreds of millions of dollars to invest.

An informal survey of major corporations showed they rely on only two or three staff people, on average, in the treasury department to handle the investments of working cash. In many cases, the corporate portfolio managers have other, non-investment duties as well.

Only in the area of so-called alternative investments, such as dividend capture strategies, do corporate treasury executives hire outside managers. But few companies surveyed employ such strategies. A number of executives, however, said they are considering devoting a small percentage of their cash to such investments and hiring outside managers.

The limited use of outside managers for corporate short-term investments contrasts with the nearly universal use of many managers to run corporate pension fund investments.

In explaining the discrepancy, treasury executives cite differences in corporate objectives that lead to different investment strategies. In addition, they said corporations need to keep the investment reporting timely and portfolio liquid. Also, some executives said their internal staff outperformed short-term investment funds.

Sun Co., Radnor, Pa., unlike most corporations surveyed, employs two outside managers to invest the company's working cash, according to William J. Latta, assistant treasurer.

But the bulk of Sun's more than $2 billion in corporate cash is invested by an internal portfolio staff of three, one of whom has other duties as well.

"We are very familiar with the cash markets," Mr. Latta said.

"We've been investing in the cash markets for a number of years. We have a staff that can do a good job compared to the rest of the money market (managers).

"I don't see where a money manager would be able to provide any value added on short-term basis . . . except on special strategies like dividend capture."

Eastman Kodak Co., Rochester, N.Y., employs one outside firm as well, assigning it an undisclosed amount in a dividend capture strategy. But most of Kodak's cash is managed internally, according to Charles Smith, manager of new services. Kodak has four staff portfolio managers to run its nearly $900 million.

At Chevron Corp., San Francisco, Malcolm J. "Mac" McAuley, deputy treasurer-banking and cash management, said the firm is considering hiring an outside special strategy manager.

"We have a study under way," he said.

Chevron has two executives in New York running the $1 billion it has domestically. He said he would view an outside manager as an "additional source of input, intelligence and commentary."

But he doubts outside managers would ever play anything but a marginal role.

Chevron's in-house short-term investing "is very much integrated in our operations," Mr. McAuley said. "We have such tremendous flows of cash; an outside manager could not be assured of having that money tomorrow."

At American Telephone & Telegraph Co., New York, John G. McNelis, portfolio manager, said the corporation has two portfolio managers who spend all their time investing. Plus, it has a crew of five in the back office taking care of investment reporting and confirmation.

Continued on page 46

Comparison of corporate cash and pension fund investment management

Company	Corporate cash ($ mils.)	Staff corp. cash managers	Outside corp. cash managers	Pension[1] fund ($ mils.)	Outside pension fund managers[2]
Ford Motor	4,000	3	0	9,500	24
AT&T	2,200	2	0	21,035	53
Chrysler	3,200	3[3]	0	2,346	10
Sun	2,000	3[4]	2	1,205	20
Mobil	3,400	NA	0	3,458	13
Eastman Kodak	879	4	1	4,511	25
General Motors	5,500	3	0	22,900	45
Archer Daniels Midland	1,279	3[3]	0	29	1
Chevron	1,000[5]	2	0	3,751	26
Johnson & Johnson	829	2[3]	0	700	10

[1] defined benefit
[2] excludes any in-house portfolio managers
[3] all have non-investment duties
[4] one has non-investment duties
[5] domestic
NA: not available
Source: the companies

To our readers:

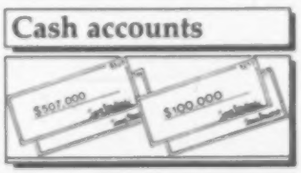
Cash Accounts, a new feature, reports which corporations are buying which cash management services and products — including short-term investment strategies, lockboxes and cash concentration systems and treasury workstations.

By reporting on specific corporations in Cash Accounts, *Pensions & Investment Age* hopes to provide insight on why cash management executives bought a particular service or product and why they chose a certain vendor, whether it is a bank, consulting firm or other cash management service provider.

Reports from corporate executives are welcome on whatever new cash management services or products are being bought and from banks and other service providers on which clients they have signed.

Please call Barry B. Burr at (312) 649-5268 or Chuck Paustian at (312) 649-5378, or write to Mr. Burr at *P&I Age*, 740 N. Rush St., Chicago, Ill. 60611.

Cash accounts



Simmon Communications Inc. taps Mellon on lockbox service

STAMFORD, Conn. — Simmons Communications Inc., a cable television operator, contracted with Mellon Bank Corp., Pittsburgh, to process consumer payments at Mellon's Los Angeles lockbox site.

Smedley D. "Chick" Butler, Simmons' vice president of finance, said Simmons recently bought a cable television system in Long Beach, Calif., its first West Coast operation.

He expects the new lockbox to process about 120,000 receipts a month.

Simmons, a closely held concern, hired Mellon, he said, because "the quality of service is good and the pricing is reasonable." He declined to give any details on pricing.

"We use Mellon in other areas," he added.

Exxon Co. USA

HOUSTON — Exxon Co. USA has developed with the First National Bank of Maryland, Baltimore, an electronic collection service, allowing wholesale customers to initiate and control the payment of invoices.

"Instead of a customer mailing a check to a lockbox, it would place a call to a toll-free number, indicating the invoice number and the amount being paid," said William Murray, senior vice president at the bank. "Many companies have been reluctant to allow suppliers to debit their accounts for payments due."

Continued on page 47

Limits likely on standby letters

Restrictions come as agencies tighten guidelines

By Chuck Paustian

Corporate cash management executives may find it more difficult to obtain standby letters of credit from their banks, and will likely find the price of those letters to have increased.

Banks may be forced to restrict their letter of credit business because federal banking regulatory agencies have proposed guidelines requiring off-balance sheet items be included when determining the bank's capital-to-assets ratio.

Some banks, especially money center banks and regional banks, already are scaling back their efforts and establishing self-imposed limits for issuing standby letters of credit.

Banking officials said those restrictions would lead to tougher standards and higher prices for corporate executives trying to obtain letters of credit.

Standby letters of credit, an irrevocable commitment by a bank to support the payments of its customer, became popular with banks during the early 1980s as a means of increasing fee income.

In general, fees range from 0.5% to 1.5% annually of the guaranteed amount provided by the standby letter of credit.

Raymond P. Gordon, managing director of Bank Valuation Inc., San Francisco, said his firm recently conducted a study of 150 banks comparing the amount of outstanding standby letters of credit to the bank's equity. The study was conducted using data as of Dec. 31.

Mr. Gordon said the study found two banks with ratios of 300% or higher and 12 banks with ratios between 200% and 299%. An additional 29 banks had a ratio between 100% and 199%, he said.

"It seems to me that the banks that are wheeling and dealing with the letters of credit are the big money center banks, or the banks trying to emulate the money center banks," said Mr. Gordon.

The business of issuing standby letters of credit became the center of further attention in a recent U.S. Supreme Court ruling on a case against the Federal Deposit Insurance Corp. filed by Philadelphia Gear Corp., King of Prussia, Pa.

The court ruled 6-3 that a standby letter of credit backed by a promissory note was not the same as a cash deposit. Court documents included a government estimate of almost $120 billion in outstanding standby letters of credit by all banks.

Bank industry experts, including the federal regulatory agencies, have expressed concern over the amount of outstanding standby letters of credit carried by some banks.

"The regulatory authorities are saying there is a limit because their is a liability there," said Mr. Gordon.

The Federal Reserve System has proposed requiring banks to maintain some sort of capital reserve for all off-balance sheet lines of business.

"The proposal does include standby letters of credit in the framework for requiring capital backing. There is no specific amount as yet," said Richard Spillenkothen, assistant director to the board of the Federal Reserve System.

The other regulatory authorities, the FDIC and the office of the comptroller of the currency, also have proposed similar guidelines.

Bank officials agreed the proposed requirements would reduce the availability of standby letters of credit and increase the price.

"It would depend on how tightly the Fed regulates it. Basically everything again is the law of supply and demand," said William Regimbal, senior international operations officer at Provident National Bank, Philadelphia. "(The banks) will be more selective in the granting of their standby letters of credit," he said.

"The banks that impose no limit at all (on their letters) will feel the greatest impact."

Some banks already have begun to reduce the amount of standby letters of credit they issue.

A bank officer of a major West Coast bank, who asked not to be identified, said, "We are still issuing, but on a very selective basis." He added the bank has about $11.5 billion in outstanding standby letters of credit.

Other banks have been following a self-imposed limit on the amount of outstanding letters of credit issued.

Richard Vanderwerf, senior vice president at National City Bank, Cleveland, said the bank has operated under such a limit in anticipation of regulatory requirements.

"A reasonable reserve ought to be established based on your evaluation of the account party on the letter of credit," he said.

"We like to keep, on average, at least a 1% reserve on our loan and standby letter of credit business.

"Our loan-loss experience might indicate that may be high today, but we prefer to be conservative."

National City Bank had between $300 million and $400

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Corporate . . .

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Despite having a portfolio of a "considerable size" — $2.2 billion — Mr. McNelis employs no outside investment firms.

The staff's performance is "very much like the money funds you see in the Donoghue and Weisenberger reports," he said, referring to Donoghue Organization Inc., Holliston, Mass., and Weisenberger Investment Co. Service, Boston, both of which track money market funds.

"We're performing here as well as the top-performing money market funds. As long as we're performing better than the money funds, we will probably still continue to manage our funds internally."

Ford Motor Co., Dearborn, Mich., has three professionals investing some $4 billion in corporate cash, said Brian Morris, manager-portfolio management department.

He contrasts money management with pension management.

"In fixed income, it's what do you think will happen with interest rates," Mr. Morris said. "I think it's a less complex task (than managing equities).

Equity investing "is a rather complex, intense, research (oriented) task," he added. "A lot of corporations take the view that it's a task for outside managers."

Like other treasury executives, Mr. Morris said Ford was adequately staffed to manage its short-term investments internally. He said the staff invests the portfolio in Treasury securities, repurchase agreements and time deposits.

He doubts outside managers could add value in "other than what you call market specialties, such as preferred stocks or adjustable rate preferred stock" strategies.

He said he gets calls occasionally from outside managers.

"They are after a little piece to manage," Mr. Morris said. "They don't want the whole thing. We get a lot of calls from preferred stock and dividend capture managers."

A money manager at Paramount Capital Group Inc., New York, which runs $40 million in taxable corporate cash for nine clients, agrees corporations can adequately manage their short-term investments internally, in less complex strategies.

"Most of the cash managers at corporations I talk with can handle the short-end (investments) more than adequately," said Bryan Scott Ganz, Paramount's chairman.

"Essentially, when you're looking at an investment manager for corporate cash, you are looking for alternative investments, such as dividend capture.

"Needless to say, you don't need an outside manager for overnight repurchase agreements or T-bills."

But for more complex strategies, such as the dividend capture in which Paramount specializes, Mr. Ganz sees corporations looking outside.

While still a short-term investment, he said a dividend strategy requires a longer outlook, at least the 46 days required to hold securities to qualify for special tax treatment.

"I think you're going to see a lot more professional management on the corporate cash side," Mr. Ganz said. "The reason is rates are dropping and people are looking for greater yield."

Sun declined to publicize the names of its two outside managers, although neither is Paramount. Each runs about $100 million in dividend capture strategies.

Mr. Latta said Sun had a third manager, "but we discontinued them. We felt they weren't following our investment guidelines." He declined to give details.

He said Sun hired the managers because, "we are getting into areas we weren't normally familiar with."

But the vast amount of Sun's corporate cash is invested by its own staff.

"I'm not really anxious to pay a money manager a heck of a lot more than we pay our in-house managers and not get a great deal in return," Mr. Latta said.

He cited the company's need for timely reporting. "Investment managers can't give us the investment information in the turnaround time we need it," he said. "Money managers report too slowly.

"I want to see what's going on in some portfolios daily and certainly in all portfolios every month. I'm not willing to wait 45 or 60 days for a money manager to generate a report, and to pay for it."

AT&T isn't considering dividend strategies, Mr. McNelis said, because of its tax position. "AT&T has accumulated tax credits," he said, to offset income.

He said AT&T's investment policy allows only trading in taxable fixed-income instruments, such as certificates of deposit, bankers' acceptances, repurchase agreements and commercial paper, and ranks safety of principal and liquidity high.

"The investment policy is reviewed every six months," Mr. McNelis said. The next review is in July.

He said AT&T's portfolio staff is "very cost efficient with two people managing it, as you can imagine. Very cost efficient." Their relatively narrow choice of investments allows them to perform adequately managing a large sum of money, he added.

At General Motors Corp., New York, a treasury executive explained why the firm runs some $5 billion in cash internally.

"It's important we keep the cash close at hand" for operations, he said. "We need to have that cash close at hand. You can't be pulling it back (from outside managers).

"Most money managers aren't too excited about being called up and being told, 'Hey, I was wrong I need $10 million (to withdraw).'

"Corporations are willing to sacrifice short-term returns for liquidity. Sometimes it's a big price to pay." ■

Plan termination reform debated

WASHINGTON — Despite the new pension reform contained in the 1985 Budget Reconciliation Act, debate continues over the need for further reform for pension plan termination policy, according to the Employee Benefit Research Institute.

Questions remain, about how often and why pension plan overfunding and underfunding occurs, and what effects overfunding may have in a pension plan termination, according to the Washington-based benefits think tank.

Asset reversions from terminations have generated controversy, because some say participants still suffer substantial losses. Others believe participants could face less severe losses if assets were used to help the employer overcome financial troubles, as opposed to losses suffered from layoffs or plant closings.

Although the new law helps to alleviate problems in terminations, more reform is needed. ■

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THERE ARE SOME THINGS EVEN CHANGE WON'T CHANGE.

7/7/86 C2710-2

Quantitative techniques give firms an edge

By Chuck Paustian

The new generation of investment managers — those who use quantitative tools to pick stocks — is successfully wooing institutional investors away from managers who rely on forecasts and personal insight.

Of the 10 firms identified by investment management consultants and *Pensions & Investment Age* as the up and coming money management firms, seven use quantitative techniques and computer models to perform such tasks as identifying the current stage of a market cycle and/or selecting specific stocks based on previously determined criteria.

The 10 firms were selected based on both external and internal data collected by *P&I Age*.

First, consultants were asked informally to identify young investment management firms perceived to be making a mark in their industry.

In addition, firms were selected based on the growth of assets under management during 1985 as reported in *P&I Age's* annual directory of money managers.

The results confirm the trend toward quantitative techniques,

Continued on page 16

Profiles of five firms begin on page 12

UP & COMERS

Pensions & Investment Age

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Zeros sold in merger of 2 plans

By Marci Baker

MORRISTOWN, N.J. — A multimillion-dollar trade of zero-coupon bonds that bypassed the trading floors on Wall Street helped Allied-Signal Corp. officials merge the $1.5 billion Signal Co. pension plan into the $3.5 billion Allied master trust.

Allied negotiated the sale of $360 million of zero-coupon Treasury securities directly with Metropolitan Life Insurance Co., New York, said Edward T. Tokar Jr., vice president-investments. The remaining $1 billion-plus assets in the Signal plan are being liquidated through more traditional trades on Wall Street as market opportunities arise, he said.

Allied and Signal merged early last year.

The bonds in the private trade have a face value of $1.4

Continued on page 52

Rates, funded status drop

$200 billion surplus wiped out

By Chuck Paustian

CHICAGO — Falling interest rates have reduced the funded status of private pension plans an estimated $200 billion to $300 billion, and may have placed the pension system in an underfunded position, industry experts said.

Perhaps the most dramatic example is that of United Air Lines Inc., Chicago. A year ago, United officials decided to terminate five plans, but the slump in interest rates prompted them to terminate only three.

The interest rate drop was largely responsible for slashing by about 64% the size of the reversion from the three terminated plans. On Oct. 9, when the PBGC issued its notices of sufficiency, the surplus for the three plans totaled more than $378 million. United ultimately was able to recapture only $136.8 million in excess assets from the same three plans.

(United originally expected to recoup $962 million had it terminated all five plans.)

"The climate got so bad, we decided not to go ahead with recovering surplus assets from the plans for pilots and flight attendants," said Joseph P. Hopkins, corporate communications manager for United.

The problem, said pension observers, is most corporate plan sponsors focus on the growth of plan assets without fully realizing the relationship between interest rates and the current value of accrued liabilities.

Under the current low interest-rate environment, many reversions will be erased, some said.

In addition, falling interest rates put the Pension Benefit Guaranty Corp., Washington, at greater risk as the unfunded portion of plan liabilities increases.

With the exceptions of brief escalations in mid-1984 and early 1985, interest rates have fallen steadily since the beginning of 1984.

Pension actuaries base their actuarial discount rate, used for determining the current value of accrued liabilities, on current long-term inter-

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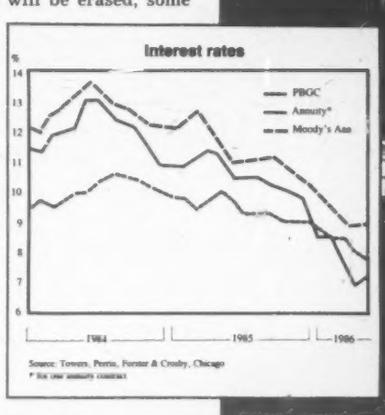

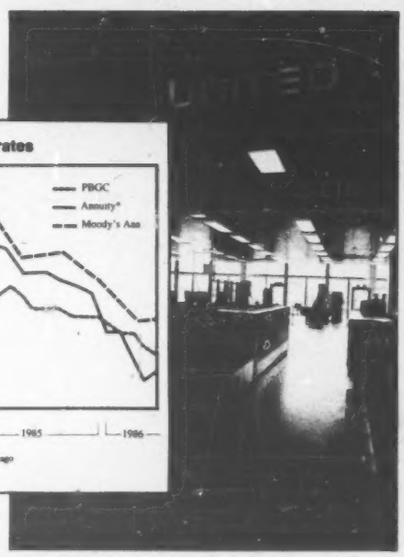

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CASH MANAGEMENT: Today's lower interest rates are causing the cost of a lockbox to supplant the advantage of float in importance when corporate cash managers pick their lockboxing sites — page 33.

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Advisers close open-end funds

Difficult, changing market forces property sell-off

By Steve Hemmerick and Ed Christman

A difficult and changing real estate market is forcing some real estate managers to shut their open-end funds and to sell off or considering selling off portfolios containing at least $400 million in properties.

• Goldman, Sachs & Co., New York will send $100 million in cash contributions back to real estate clients and shut its open-end fund, Institutional Property Assets, to new contributions, officials there said.

Hereafter, Goldman officials said, they will concentrate on megadeals for separate accounts, and sell, when opportune, their fund's $200 million in assets.

• Bank of America Investment Real Estate, San Francisco, is closing its fund, with $80 million in assets, and selling off the properties. The firm will continue its separate account business.

• Crocker Real Estate Investment Group, San Francisco, which froze an open-end fund containing an estimated $90 million in assets last fall, has since terminated the fund.

• Mercantile Trust Co., St. Louis, closed its open-end Mercantile Real Estate Fund "R" late last year and sold off the entire $60 million portfolio. The fund since has been reopened, but will invest only in real estate investment trusts.

• Officials at Connecticut Mutual Life Insurance Co., Hartford, are asking clients if they should close their $27 million open-end fund, CM Properties, and sell off its properties.

Despite the forced sell-off of the properties in the portfolios, real estate prices won't be driven down further, experts say. One reason is the

Continued on page 55

Instead of first collecting the money, then looking for deals, Goldman uses its visibility to negotiate major deals first, then looks for investors.
— Claude Ballard
Goldman, Sachs

Funds link executives' pay to performance

By Brad Rudin

Driven by the need to attract top-notch eople, both private and public pension lan sponsors are inching toward a system hat ties the chief investment officer's pay o fund performance.

Rather than focusing on the external or nternal money manager, the usual subject f attention when performance-based compensation is discussed, this approach targets the staff member who oversees the und's managers.

Since 1982, state pension systems in outh Dakota and California have adopted ompensation systems that are based parially on their respective fund's investment erformance. In addition, GTE Services Corp., a unit of GTE Corp., and the Rockeeller Foundation have taken a similar pproach.

"I think there is a trend," said Stephen R. Myers, investment officer at the South Dakota Investment Council, Sioux Falls, nd a supporter of performance-based pay.

"I've received a number of calls from a umber of boards of directors of state unds. Some of them are visiting my office n the next couple or three months" to disuss internal management and performance-based salaries, Mr. Myers said.

Although Mr. Myers' counterparts at other public pension plans said they support incentive pay for portfolio managers — as adopted in Virginia — few backed a compensation system that linked the chief investment officer's salary to fund performance.

They disputed the fairness of any compensation system that held chief investment officers accountable for decisions made by a board of trustees or a money manager.

The move toward performance-based compensation is slow in the public sector because the change frequently requires legislative approval. In addition, skepticism among the investment officers slows the pace of change.

In the private sector, corporate executives are wary about compensation plans that boost costs and create special entitlements.

But the push toward performance-based pay remains, the product of a need to hire — and keep — the best staff.

Mr. Myers oversees the state's $1.3 billion investment portfolio, of which 95% is managed internally. Of the total, $900 million is pension assets. He said South Dakota in 1982 became the first state to link fund performance to the chief investment officer's compensation.

Under the South Dakota system, the investment officer receives a bonus worth 33% of his base pay if the fund finishes the year in the top 25 percent of a universe established by SEI Funds Evaluation Services, Wayne, Pa., Mr. Myers said.

South Dakota's yearly investment return is compared with the composite of five benchmarks that mark the performance of public- and private-sector funds.

If the South Dakota fund ranks between the 26th and 33rd percentile, the investment officer receives a 25% bonus. Performance below the 34th percentile results in no bonus for the investment manager, Mr. Myers said.

He receives a base salary of $72,000. The bonus is paid on an annual basis, based on the fund's performance of the past two years. In both 1984 and 1985, Mr. Myers received the 33% bonus.

California followed suit in 1985, when the California Public Employees' Retirement System, Sacramento, hired Greta E. Marshall to administer the now-$36.3 billion pension fund.

Ms. Marshall, formerly the president of Bay Banks Investment Management in Boston, said she would not have come to California without the incentive system.

Ms. Marshall qualifies for a bonus depending on the performance of the fund relative to the Standard & Poor's 500 stock index, the Consumer Price Index and the fund's actuarial rate of return. Performance is also measured against bond duration targets.

The incentive system could give Ms. Marshall, a contract employee with a base salary of $125,000, up to $25,000 in additional pay this year, up to $50,000 next year and $75,000 in the year after that.

In March, the Virginia Supplemental Retirement System, Richmond, started a system that links the compensation of its internal portfolio managers to fund performance. The system's chief executive, however, remains unaffected by the change.

The list of states using performance-based pay systems likely will grow, Mr. Myers said. "There are a number of states that have it before their boards of directors, but I'm not going to tell you who they are."

In the private sector, only GTE Services Corp., Danbury, Conn., and the Rockefeller Foundation, New York, could be identified as having compensation systems that hinge on fund performance.

Continued on page 55

8 commit to venture capital

High-technology, health-care partnerships chosen

By Trudy Ring

At least eight tax-exempt funds ade initial or additional venture apital commitments recently, hoosing partnerships oriented to igh technology or health care.

The $485 million CIBA-Geigy orp. pension fund, Ardsley, N.Y., ade its first venture capital ommitments, allocating $2.5 million to each of three partnerships - Interven Partners, Los Angeles; outhern California Ventures II, nglewood, Calif.; and Lawrence enture Associates, New York.

William McHugh Jr., CIBA-Geigy's manager-trust investments, said the commitments are n accordance with a new asset llocation strategy that allows the und to put up to 5% of its assets nto venture capital. The goal in sing venture capital is to enhance eturns and diversify investments, e said.

The fund likely will commit to ght or 10 partnerships overall, Ir. McHugh said. Wilshire Associates, Santa Monica, Calif., is elping select the partnerships.

The $402 million Avon Products nc. pension fund, New York, ommitted $3 million to each of hree venture capital partnerships — Interven Partners, Lawrence Venture Associates and S & L Health Care Ventures, New York.

Avon made the commitments because locking in gains with a dedicated bond portfolio allowed the fund to take more risk in other areas, said Helmuth Fandl, vice president-taxes. The fund dedicated $65 million and put $35 million into stock index funds (*Pensions & Investment Age*, Jan. 6).

Its only earlier venture capital commitment was $10 million to Venture Lending Associates, New York, two years ago, Mr. Fandl said. Now, also with the help of Wilshire, Avon likely will look at other venture capital investments to bring its commitment to about 10% of total assets, he said.

The $565 million San Bernardino County Employees' Retirement Association in California committed $3 million each to Interven Partners and Southern California Ventures II.

These are the fund's first pure venture capital commitments, although it has invested in leveraged buy-outs, said Richard Yankee, retirement administrator. The venture capital investments complete the fund's application of its new asset allocation model, Mr. Yankee said.

The $47 million University of Tennessee endowment fund, Knoxville, also made its initial venture capital commitment, allocating $1 million each to Interven Partners and Lawrence Venture Associates.

"Our fund had reached the level where it had sufficient funds to begin to include some non-traditional investments," said A. David Martin, treasurer. The high rate of return available with venture capital made it an attractive investment, he said.

The fund eventually will put between 5% and 10% of its assets in venture capital, Mr. Martin said.

The $40 million Echlin Inc. pension fund, Branford, Conn., committed $500,000 to Southern California Ventures II and $600,000 to Abacus Ventures, Stamford, Conn., said Bill Bowman, spokesman for the fund. The pension fund had invested in an earlier fund raised by Southern California Ventures' principals, he said.

The $6.5 billion Oregon Public Employes Retirement System, Salem, committed $5 million to Interven Partners, said James C.

Continued on page 53

Torray's firm loses business from 11

By Joel Chernoff

BETHESDA, Md. — Robert E. Torray & Co. Inc., considered one of the pre-eminent investment management firms when it was known as Torray Clark & Co. Inc., has lost part or all of at least 11 accounts, totaling about $1 billion in assets.

Clients terminating or paring their allocations to the contrarian manager cite various reasons, including the firm's disastrous performance in the past two years and the departure in December of David Clark, who many viewed as Torray Clark's key stockpicker.

But some clients, including Trans World Airlines Inc., New York, dropped Torray as part of broader restructurings unrelated to the firm's situation.

Others are reviewing their commitments, while still others are sticking to their guns. Robert Torray, president of the firm, was unavailable for comment.

Torray's heavy bet on energy-related stocks, accounting for roughly 30% of invested equity assets, has dragged down its performance. In addition, it typically has held 30% of assets in cash during the past year's bull market, sources said. According to CDA Investment Technologies Inc., Silver Spring, Md., Torray's equity assets, excluding cash, had a return of −0.6% for the year ended March 31, compared with 37.7% for the Standard & Poor's 500 stock index. For the two-year period, the firm had a 0.2% compound annual return vs. 28% for the S&P. For five-year figures, Torray fared better, with a 14.7% compound annual return, compared with 17% for the S&P.

According to the firm's filing with the Securities and Exchange Commission in Washington, it managed $2.43 billion in assets as of March 1986. The loss of several major accounts has sharply eroded the firm's asset base. Since fall, client defections have become more frequent. The Washington State Retirement

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3 enter international arena

By Rose Darby

Pacific Gas & Electric Co., the assachusetts Pension Reserves vestment Trust and the Houston unicipal Employees' Pension an all hired their first internaonal investment managers for a tal of $145 million.

PG&E, San Francisco, with $2.1 llion in assets, put about 5%, or '0 million, of its equity allocaon into non-U.S. equities, said nny Oberoi, director of pension nd management.

Capital Guardian Trust Co., Los ngeles, was given $30 million to n in a core-type account; Putm International Advisors, Boston, ill manage a $20 million aggressive owth equity fund; and Arnhold & Bleichroeder International, New ork, will manage $20 million in lue-oriented international equis, he said. PG&E might increase commitment in the future, he id.

PRIT in Boston, which has $1.25 billion in assets, hired three managers to run South Africa-free, non-U.S portfolios, with more hirings to take place soon, said Dan Kelly, director of program development. The managers are: N.M. Rothschild International Asset Management Ltd., London; Scudder, Stevens & Clark, New York; and Warburg Investment Management International Ltd., New York.

PRIT allocated $45 million total to international. The PRIT board is looking for an international equity index manager and an additional active equity manager, Mr. Kelly said.

"We are delighted with the choices we've already made," he said. "They did a lot of work with the South Africa restrictions we gave them."

The $435 million Houston plan hired Alliance Capital Management International Inc. and IDS International Inc., both in London, for $15 million each in non-U.S. equities, said Cliff Tuttell, chairman of the board of trustees. ■

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INVESTMENT MANAGEMENT
Two Oliver Street
Boston, MA 02109
(617) 439-6116
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Illinois fund realigns; $1.1 billion affected

By Trudy Ring

CHAMPAIGN, Ill. — The $2.3 billion Illinois State Universities' Retirement System has more than doubled its investment in passive strategies, made its first international commitment, adopted portfolio insurance and increased its real estate investments.

More than $1.1 billion in assets will be affected in the strategy.

The system hired Wells Fargo Investment Advisors, San Francisco, to manage all its passive investments and provide portfolio insurance, also called dynamic hedging, said Jeanne Valcik, pension investment analyst.

"We felt like we were paying active management fees but we were basically performing passively, so we decided to go more passive," M$. Valcik said.

Wells Fargo will manage slightly more than $1 billion passively. The system had about $496 million committed to passive strategies previously, all in equities.

Wells Fargo will manage about $657 million in a stock index fund tracking the Wilshire 5,000. Another $246 million will be in a bond index fund tracking the Salomon Brothers Broad Investment Grade bond index.

In the system's first commitment to international investing, Wells Fargo will manage $118 million in a stock index fund tracking the Morgan Stanley Capital International Europe, Australia Far East index. The system went into international to add diversification, Ms. Valcik said.

The remaining portion of the passively managed money, about $34 million, will be in cash for use in the portfolio insurance program. Portfolio insurance involves the sale of financial futures to halt losses. A decline in the portfolio's value triggers the sale.

The portfolio insurance program will cover all domestic marketable securities, or slightly more than $2 billion of the fund, with a one-year time horizon and a −7.5% minimum rate of return. The system adopted portfolio insurance to capture gains and to be able to take on additional risk, Ms. Valcik said.

In real estate, the system committed $50 million to Aetna Life & Casualty Co.'s Real Estate Separate Account, Hartford, Conn., and an additional $37 million to The RREEF Funds, San Francisco. The fund already had about $100 million with RREEF.

In the restructuring, the system terminated four managers, she said. They were passive equity managers American National Bank & Trust Co. of Chicago, which ran $445 million, and Dimensional Fund Advisors Inc., Santa Monica, Calif., which handled $51 million; active bond manager Lehman Management Co. Inc., New York, which ran $330 million; and balanced manager Criterion Investment Management Co., Houston, which ran $42 million. ■

N. Dakota teachers picks 4

By Marci Baker

BISMARCK, N.D. — The North Dakota Teachers' Insurance & Retirement Fund has selected four bond managers in an overhaul that will introduce multiple managers and an increased equity exposure to the $290 million fund.

Bear Stearns Asset Management, New York; Sanford C. Bernstein & Co., New York; Criterion Investment Management Co., Houston; and Investment Advisers Inc., Minneapolis, each was allocated $45 million to run in fixed-income accounts, said Scott Engmann, executive secretary.

In addition, fund officials and its consultant, Callan Associates, San Francisco, are looking to hire at least two stock managers to increase equity exposure to the 20% maximum under state law.

The fund now is 10% invested in equities through a stock index fund with Wilshire Associates Asset Management Division, Santa Monica, Calif.

Funding for the new bond and stock managers will come from the Bank of North Dakota, Bismarck, which has been running $260 million in a fixed-income account. The bank will continue to manage some fixed-income assets for the fund.

"We're doing this to diversify and reduce risk," Mr. Engmann said. The moves follow an asset allocation study recently completed by Callan.

That study, among other things, recommends a 45% equity commitment. In line with that, the State Investment Board, which oversees the teachers fund along with a $200 million worker's compensation plan, wants legislation passed next year to ease the legal list of investment guidelines.

State law also requires the fund to have 50% in government securities. Bond investments must be rated AA or better.

Also, the fund is prohibited from using such vehicles as options or futures.

As a result, the four new bond managers all lean toward more conservative and short-term investment styles, but "all of their styles are different," Mr. Engmann said.

As a result of asset growth and the change in investment approach, the State Investment Board will hire a full-time investment officer, Mr. Engmann said. Now, Herbert Thorndal, president of the Bank of North Dakota, fills that role. ■

Corrections

- In the May 12 issue, the median **PIPER** equity commingled fund return for the 10 years ended March 31 was reported incorrectly. The median return was a compound annual 13.6%.
- **Reserve Management Corp.** is in New York. A chart of mutual fund families in the May 12 issue gave an incorrect location.
- Total assets under management by **Manufacturers Life Insurance Co.**, Toronto, Ontario, were $13.1 billion, as of Jan. 1. The figure was given incorrectly in the May 19 special profiles issue of investment managers.
- Asset to liability ratios relating to **Union Carbide Corp.**'s use of a new kind of annuity in terminating its pension fund were incorrectly stated as percentages in a June 23 story. For example, a statement saying Union Carbide "effectively has no constraints on the investment management of the assets covering its liabilities" should have continued, "as long as assets exceed accrued liabilities by 1.2 or 120%."

Opinion

Raymond a warning on ESOPs

EMPLOYEE STOCK OWNERSHIP PLANS should not be the sole retirement plan for any company.

Many experts, including strong proponents of ESOPs, have stated this in the past. Their warnings have been given strength by the plight of the Raymond International Inc. ESOP.

The value of Raymond International's shares, 65% of which are owned by the ESOP, has plunged in the wake of the oil price decline, because the company's fortunes were tied closely to the fortunes of the oil industry.

Now the company is negotiating with its creditors to restructure $200 million in debt used to finance the leveraged buy-out of the company by the ESOP.

Unfortunately, Raymond International terminated its defined benefit plan in 1983 and recaptured $30 million in surplus assets to help finance the buy-out, leaving the ESOP as the only retirement plan.

Perhaps Raymond International will be able to negotiate a restructuring with its creditors and will survive to prosper when the oil price slump is reversed. But if it should fail, employees will receive little in the way of additional pension benefits for the past three years of service.

The Raymond employees are lucky they received annuities for the pension benefits they had accrued before the ESOP was started. They will thus have some pension benefits should the worst occur.

But in other companies where an ESOP is used as the sole pension plan, the employees may have all of their eggs in one basket. If the company fails, not only do they lose their jobs, but also they lose their pension benefits because the Pension Benefit Guaranty Corp. does not guarantee the benefits of an ESOP.

An ESOP is an excellent device to spur employee participation in companies, to share the corporate wealth and to enhance employee productivity.

It is an excellent employee benefit, a supplement to some other retirement plan.

It is not a good vehicle as a sole retirement plan.

Tax reform tests investor stamina

THE TAX REFORM BILL will provide pension funds invested in real estate an opportunity to prove they are the long-term investors they are supposed to be.

Most experts seem to agree the tax reform bill will cause real estate prices to drop in the short term, but will be positive for real estate investment returns in the long run.

This is because the new tax rules will eliminate real estate tax shelters and drive the tax-shelter syndicators out of the market. Already some syndicators reportedly are preparing to sell some of their properties. This will drive down real estate prices in the near term.

However, some buildings that might have been built to take advantage of the old tax laws will not now be built. As a result, the surplus of office space in various parts of the country eventually will be absorbed and rents should rise.

Thus, in the long run the return on investment from real estate should be higher than it would have been without tax reform.

The positive effect of tax reform may not show itself, however, for a year or two, until the office surplus has been absorbed.

Thus, only if a pension fund is truly a long-term investor, and somewhat contrarian, will it make a significant contribution to real estate now.

At the end of the year the pension industry will be able to tally how many long-term, contrarian investors are in its ranks.

Funds' moves provide social benefits

MANY TIMES *Pensions & Investment Age* has editorialized against the use of pension assets for "social investing" — that is, accepting lower investment returns while using the funds to achieve some social good unrelated to the needs of the pension beneficiaries.

Most pension fund investments already are producing social benefits by securing the retirement benefits of beneficiaries, and making available investment resources for the growth of business or industry.

But some investments produce social benefits that are more obvious to the general public. Too often, these have been mistaken for "social investments."

An example is a pension fund investment in housing. When such an investment is made at below-market rates of return it is "social investing."

When it is made at market rates of return it is not "social investing," although it still performs a social good.

The former is objectionable. The latter is not.

Two East Coast public pension funds and a West Coast union fund have taken the latter route with real estate investments.

The Pension Reserves Investment Trust of Massachusetts, the Massachusetts State Employees' & Teachers' Retirement System and the International Longshoremen's and Warehousemen's Union and Pacific Maritime Association pension fund have all made real estate investments in housing at market rates.

The trustees of these funds should be applauded for making the investments at market rates of return, resisting what must have been a temptation to make the money available at below-market rates.

Below-market rates might have won the trustees political points, but would have imposed a hidden cost on the beneficiaries.

Letters to the editor

Editor's note: The letters printed below, and on page 46, are in response to Pensions & Investment Age's *May 19 directory of investment advisers.*

Systematic Investors

To the Editor: A profile on Systematic Investors Inc. was not included in the May 19 special profiles issue of the largest money managers.

As of Jan. 1, Systematic Investors, 184 High St., Boston, Mass. 02110, (617) 423-9691, had $30.5 million in total assets under management. All were tax exempt. The approximate asset mix was 76% stocks and 24% bonds.

There were four corporate, tax-exempt clients. Minimum account size is $3 million.

Systematic Investors is primarily a balanced manager, using a quantitative approach. In equities, 90% of all performance is derived from exposure to market volatility. Securities are grouped within classes, representing this exposure with predictable long-term returns.

The fixed-income orientation is long-term, with monetary and economic policy dominating the outcome. Much less emphasis is placed on swapping sectors, coupons and maturities.

There are two portfolio managers.

Clients include Beverage Management, Frozen Food Express, Farmland Industries and National Gypsum.

Loren M. Wood, president, is chief investment officer and client contact.

Wayne J. Archambo
Systematic Investors Inc.
Boston

Brown Brothers

To the Editor: I apologize for the confusion in missing the deadline for the May 19 directory of investment managers. I guess we are not very good at filling out forms. More importantly, perhaps, I should also add that at the time yours was due, we had yet to receive a final tally on total assets under management.

The correct numbers are as follows:

Total assets managed, $10.29 billion; tax-exempt assets managed, $6.34 billion; international assets managed, $303 million; passive assets managed, $370 million; minimum separate account, $1 million; tax-exempt clients, 430; types of accounts managed — corporate, endowment, foundation, government, jointly trusteed; number of portfolio managers, 65; and size of research staff, 25.

The bottom line of all the above is that the firm added 29 tax-exempt clients in 1985, and increased tax-exempt assets under management by $493 million.

Frank J. Keeler
Manager
Brown Brothers Harriman
New York

Pensions & Investment Age

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100 largest investment institutions ($ mil.)

The following table is an updated listing of the 100 largest investment institutions. Assets are as of Jan. 1 and include subsidiaries. The first listing ran in the May 19 issue of *Pensions & Investment Age.*

1.	Prudential Insurance	123,200
2.	Metropolitan Life Insurance	94,080
3.	Equitable Life Assurance	91,400
4.	Chase Manhattan	87,687
5.	Aetna Life and Casualty	83,484
6.	American Express	74,777
7.	Merrill Lynch	58,774
8.	Security Pacific	53,600
9.	Citicorp	49,700
10.	Wellington Management/TDP&L	48,245
11.	Bankers Trust	46,860
12.	Travelers Insurance	45,254
13.	TIAA-CREF	45,000
14.	FMR	40,000
15.	J.P. Morgan	39,843
16.	CIGNA	39,000
17.	John Hancock Mutual Life	37,088
18.	Mellon Bank	34,240
19.	Wells Fargo	33,546
20.	Sears Roebuck*	32,766
21.	Wachovia Bank	31,786
22.	Dreyfus Group	31,000
23.	New York Life Insurance	31,000
24.	Manufacturers Investment	31,000
25.	State Farm Group	30,000
26.	New England Mutual Life	29,379
27.	California Public Employees	29,166
28.	Scudder Stevens & Clark	28,530
29.	Kemper	28,355
30.	General Electric	26,400
31.	New York State Common Fund	25,997
32.	The Capital Group	24,309
33.	First Interstate Bancorp	23,000
34.	First Chicago	20,803
35.	Marsh & McLennan/Putnam	19,357
36.	T. Rowe Price Associates	18,600
37.	Northern Trust	18,000
38.	Hartford Life Insurance	17,742
39.	BankAmerica	17,227
40.	Franklin Resources	17,000
41.	Northwestern Mutual Life	16,784
42.	E.F. Hutton Group	16,000
43.	Massachusetts Mutual Life	15,579
44.	New York State Teachers	15,303
45.	American General	15,300
46.	Bankers Life	15,149
47.	Pacific Mutual Life	15,093
48.	Chemical New York	15,013
49.	Van Kampen, Merrit	14,706
50.	State St. Bank and Trust	14,454
51.	CNA Financial	14,169
52.	Wilmington Trust	14,000
53.	Lincoln National	13,550
54.	JMB Realty	13,400
55.	Harris Bankcorp	12,900
56.	MONY	12,806
57.	PMC Financial	12,610
58.	N.J. Division of Investment	12,494
59.	Delaware Management	12,409
60.	Fidelcor	12,000
61.	Batterymarch Financial Mgt.	11,905
62.	The Criterion Group	11,500
63.	Fiduciary Trust, N.Y.	11,216
64.	Texas Teachers Retirement	11,188
65.	U.S. Trust Co., N.Y.	11,154
66.	Nationwide Mutual Insurance	11,115
67.	Bank of New England	10,900
68.	Continental Illinois	10,839
69.	Wisconsin Investment Board	10,800
70.	Stein Roe & Farnham	10,800
71.	Ohio Public Employees	10,760
72.	Michigan State Employees	10,516
73.	AmeriTrust	10,406
74.	First Bank Systems	10,400
75.	Mass. Financial Services	10,325
76.	Mitchell Hutchins Asset Mgt.	10,301
77.	Ohio State Teachers	10,178
78.	Liberty Mutual	10,000
79.	Oppenheimer Holdings	10,000
80.	Washington Investment Board	9,900
81.	Brown Brothers Harriman	9,847
82.	Minnesota State Board	9,800
83.	Neuberger & Berman	9,587
84.	Mutual Benefit Life	9,444
85.	Bank of New York	9,200
86.	Trust Co. of the West	9,110
87.	Fayez Sarofim	9,061
88.	Boatmen's Bank Shares	9,000
89.	Endowment Mgt. and Research	9,000
90.	Continental	8,838
91.	Fischer Francis Trees & Watts	8,800
92.	N.C. Retirement System	8,733
93.	Miller Anderson & Sherrerd	8,400
94.	Connecticut Mutual Life	8,355
95.	NBD Bancorp	8,190
96.	U.S. Steel & Carnegie	8,000
97.	INVESCO	8,000
98.	Rothschild Inc.	8,000
99.	Centerre Trust	7,984
100.	Transamerica	7,805

*Estimate

Letters to the editor

Editor's note: The letters printed below, and starting on page 10, are in response to Pensions & Investment Age's *May 19 investment advisers directory.*

Flippin, Bruce, Porter

To the Editor: We have just received the May 19 special profiles issue and find our new investment advisory firm is not listed. Please accept the following data.

Flippin, Bruce & Porter Inc., 800 Main St., Suite 202, Lynchburg, Va. 24504; (804) 845-4900.

Total assets managed, $133 million; tax-exempt assets managed, $95 million; minimum separate account, $1 million; tax-exempt clients, 3; types of accounts managed, corporate and endowment; and number of portfolio managers, 2.

Flippin, Bruce & Porter Inc. is an equity only and equity-oriented balanced manager.

A contrarian equity approach is used with decisions made by looking beyond current investor emotion, discounting Wall Street expectations and then relating historical financial company characteristics to current price.

In fixed income, the firm uses governments and short maturity corporates to create a "barbell of quality" structure, which produces a short average maturity with a higher-than-average yield.

The asset mix Jan. 1 was 82% stocks, 13% bonds and 5% cash.

Clients include Mead, Montague Betts and Sweet Briar College.

John M. Flippin, John T. Bruce, and R. Gregory Porter are principals and client contacts.

We regret we did not call to request a questionnaire and do appreciate your consideration in publishing our firm's data.

R. Gregory Porter III
Flippin, Bruce & Porter Inc.
Lynchburg, Va.

Herbert R. Smith Inc.

To the Editor: Enclosed is our contribution. Thank you . . .

Herbert R. Smith Inc., 1105 Holliday, Wichita Falls, Texas 76301; (817) 723-5565.

Total assets managed, $1.497 billion; tax-exempt assets managed, $197 million; minimum separate accounts, $2 million; tax-exempt clients, 25; types of accounts managed — corporate, endowment, foundation, government and jointly trusteed; and number of portfolio managers, 3.

Herbert R. Smith Inc. is a fixed-income, equity and balanced fund manager. The firm applies a dual screen approach of technical and fundamental analysis to its decision-making process in both the fixed-income and equity sectors.

Fixed-income policy centers on a risk-averse but active approach, making use of high-quality and short- to intermediate-maturity structures. Maturity selections are a function of yield curve and risk-reward analysis.

Equity selections center on a profile of strong earnings growth, moderate p/e ratios and high return on equity. Technical patterns are very important to initial selection and to retention. Portfolios contain a definite representation in medium- and small-capitalization situations. Research is 60% to 65% internally generated; 70 stocks are followed closely. Because of the firm's heavy use of computers, a very large general universe is followed.

The asset mix Jan. 1 was 85% bonds, 5% stocks and 10% cash.

Clients include Texas Instruments, Noble Affiliates, Continental Airlines and Trailways Lines.

Herb Smith, chairman, Murphy Davis, vice president, investment officers-client contacts.

Herbert R. Smith
Chairman
Herbert R. Smith Inc.
Wichita Falls, Texas

Investment Mgmt.

To the Editor: We at Investment Management Group of Wichita, Kan., were pleased to submit data for your recent profile issue on money managers. However, that data was overlooked for inclusion in this publication.

Investment Management Group is an independent investment adviser specializing solely in the management of fixed-income securities.

The fixed-income strategy encompasses interest rate anticipation based on macroeconomic forecasts. Portfolio durations are actively managed. Options on financial futures are utilized.

The Jan. 1 asset mix was 75% bonds, 20% mortgage-backed securities and 5% cash equivalents.

Clients include the state of Kansas, Wisconsin Public Service Corp. and MDU Resources Group.

Don S. Peters is the chief investment officer. Marc A. Vincent is client contact.

Total assets managed, $725 million; tax-exempt assets managed, $425 million; tax-exempt clients, 8; minimum separate account, $5 million; types of accounts managed — corporate, endowment, foundation, government, jointly trusteed; and number of portfolio managers, 3.

Marc A. Vincent
Senior portfolio manager
Investment Management Group
Wichita, Kan.

Mutual of America

To the Editor: We have reviewed the May 19 special profiles issue of *P&I Age* in which Mutual of America's profile appears on page 86.

In the fourth paragraph describing our operation in the profile, the asset mix that is defined as that of "tax-exempt assets Jan. 1" is actually the distribution of assets held in our separate accounts. This mix differs drastically from that of our total tax-exempt assets, which was stocks, 17.32%; bonds, 80.15%; cash, 0.36%; other, 2.17%.

Thank you . . .

Robert G. Malm
Vice president
Mutual of America
New York, N.Y.

Editor's note: The data requested and used for all insurers was for separate accounts.

Heitman Advisory

To the Editor: I would like to correct an error that was printed in the Heitman Advisory Corp. profile on page 67 of the May 19 issue. For future reference, Stephen M. Perlmutter is chairman of Heitman Advisory, not Norman Perlmutter, Herbert Kuehnle is vice chairman and David M. Glickman is president.

While I understand *P&I Age* was not at fault, please note the correction on all previously submitted questionnaires that contain the error. We appreciate your assistance in this matter, and the opportunity to work with you.

Gladys L. Jackson
Research analyst
Heitman Advisory
Chicago

CMB Investment

To the Editor: I would like to congratulate you on the May 19 issue. The profiles are interesting and the data most helpful. Unfortunately, the listing for CMB Investment Counselors contained several mistakes.

1. The mix of tax-exempt assets under management Jan. 1 was: stocks 18%, bonds 57%, mortgage-backed securities 18%, cash 7%.

2. CMB does not manage real estate assets. The percentage in mortgage-backed securities was applied to total tax-exempt assets.

3. CMB did not lose any accounts in 1985. The reduction in tax-exempt assets was the net of contributions and withdrawals. We manage one large account that is self-liquidating over time.

4. The brief description of the equity approach should read as follows: CMB identifies themes and concepts affecting equity values and emphasizes quality, operating momentum and values in stock selection.

5. Thomas J. Steffanci, senior managing director, is chief investment officer. Gordon C. Coomans, managing director, is client contact.

Gordon C. Coomans
CMB Investment Counselors
Los Angeles

Editor's note: Aside from the categorization of mortgage-backed securities as real estate assets, all other information in the profile was provided incorrectly by CMB.

First Trust Co. Inc.

To the Editor: Your special profiles issue incorrectly states the structure of First Trust Co. Inc.

First Trust is the product of the consolidation of two entities of First Bank System, the trust department of First Bank Minneapolis and First Trust Co. of St. Paul. First Trust did not merge with First Bank Minneapolis. Thanks for noting our correction.

William D. Bensman
Vice president
First Trust Co. Inc.
St. Paul, Minn.

C2710-2

Torray Clark breakup bitter

By Joel Chernoff

BETHESDA, Md. — Shortly after David T. Clark was dismissed as executive vice president of Torray Clark & Co. Inc., the locks on the doors were changed.

That action was emblematic of how the relations between Mr. Clark and Robert E. Torray had soured. After nearly 14 years in business together, the breakup was akin to the dissolution of a marriage.

"Each person was responsible for 100% of the success and 0% of the failure," said one observer.

The hostilities did not cease with Mr. Clark's dismissal in December.

By April, Mr. Clark had sued his former firm and its board of directors. Not only did he accuse Mr. Torray, the firm's president and chairman of the board, of cheating him out of his profits as shareholder of one-third of the firm's stock, but also he vigorously protested Mr. Torray's

Continued on page 31

Wall St.'s biotech spree put on hold

Wall Street is going through a cooling-off period after a buying spree involving biotechnology stocks. Genentech, whose lab is pictured at right, was the first biotech company to bring a product to market with the growth hormone Protropin in 1985. Turn to the corporate finance section, page 13.

Pensions & Investment Age

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Alternative minimum tax at issue

Senate reform bill could hit corporate funds

By Richard J. Gillespie

WASHINGTON — The Senate version of tax reform inadvertently would impose an unprecedented tax on corporate pension funds that could cost U.S. companies millions of dollars.

Through its provisions for toughening the alternative minimum corporate tax, the Senate bill could cause reported income — which is affected by reported pension expense — to be included in tallying the tax.

Companies subject to the alternative minimum tax proposal would have to pay tax on differences in pension fund expense arising from the Financial Accounting Standards Board's Statement 87 on pension fund accounting.

Although the House bill does not contain a similar provision, pension experts note the outcome of the House-Senate tax conference committee now meeting is far from clear.

Meanwhile, the Securities and Exchange Commission has backed away from the reported income issue, allowing the FASB to take the lead in the area.

The issue of changing the alternative minimum tax also has generated concern in Congress.

Pearre Williams, legislative assistant to Sen. Malcolm Wallop, R-Wyo., a member of the conference committee, said, "Everyone points to it and says: 'Now big corporations will have to pay taxes.'

"When you take a look at it very closely, you see that it is not good policy, but totally political."

"There are significant problems, and some people are starting to recognize that it may be a very difficult concept to implement," said Lawrence Portnoy, tax partner at Price Waterhouse, Washington.

Mr. Portnoy said Congress is considering switching to a rule based on earnings and profits and dropping the reported income concept, but would retain certain items (not yet defined) in computing the tax.

Harold Dankner, technical head of benefits consulting operations at Coopers & Lybrand, Washington, said taxing reported income might cause companies to inadequately fund their plans and even terminate them.

"I think in the pension area it makes no sense for a host of reasons, and we have been very disturbed about the concept altogether," Mr. Dankner said.

"Under the Senate bill, companies that have had favorable investment experience would be penalized because of their favorable experience, and to penalize companies while assets are at an

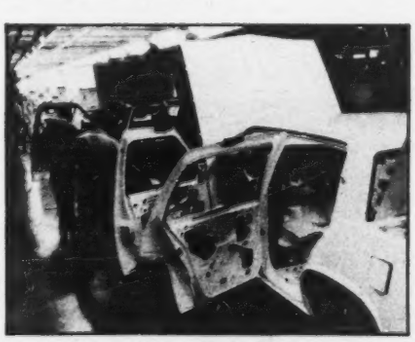
Continued on page 30

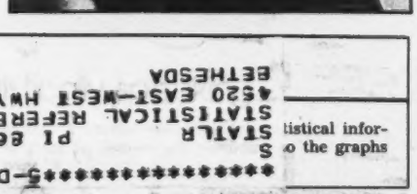
Inside:

CASH MANAGEMENT DIRECTORY

- Corporations are slowly switching to paying cash for their bank cash management services, prompting banks to try and impose surcharges — page CM1
- More companies are using commercial paper to meet their short-term financing needs, thus reducing the number of loans issued by money-center banks — page CM28
- Profiles of cash management banks, associations, service providers, treasury workstation vendors, short-term investment managers, data base suppliers and microcomputer software firms — page CM8

• General Motors is trying to integrate cash management with manufacturing by devising its own network for electronic trade payments — page CM1





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Junk bond deals not all roses

GECC sale irks investors

By Marci Baker

STAMFORD, Conn. — General Electric Credit Corp. is turning a quick profit — much to the chagrin of some "junk bond" investors — by immediately selling the $400 million in debt it provided in the just-completed $3.7 billion leveraged buy-out of R.H. Macy & Co., New York.

GECC is selling $400 million in 14.5% senior subordinated Macy debentures due 1998 in a public offering jointly managed by Goldman, Sachs & Co. and Kidder, Peabody & Co., both of New York.

GECC will retain, however, its almost $60 million investment in Macy preferred stock, which will be convertible in a 20% common equity stake in the retail concern.

The move has angered some junk bond investors, who enthusiastically bought positions in an offering of $950 million of Macy bonds in June. Investors knew GECC intended to sell its Macy bonds publicly, but they didn't know it would happen so fast.

"Most investors are perturbed that GE Credit would come out so quickly to sell the bonds," said David Solomon, president of Solomon Asset Management, New York, one of the original investors who later sold some of his bonds.

To the investors, the transaction says "GE Credit doesn't want to own the bonds of Macy's, and they are turning around and dumping them in our lap just to get the equity in the deal," said another junk bond investor.

Junk bond investors have grown increasingly critical of the bonds — sometimes dubbed "cram-down money" — being presented to them in acquisition-related deals. Corporate management, major financial institutions and Wall Street firms arranging the deals get the most attractive investments in the deals, while junk bond investors are being offered the leftovers, they complain.

Despite their objections, the investors concede investment bankers aren't having any trouble finding buyers for acquisition paper, largely because of

Early calls worry holders

By Marci Baker

Junk bond investors are alarmed that high-yield bonds in their portfolios may be vulnerable to being called in early through use of a controversial mandatory redemption clause.

According to a recent research report by Morgan Stanley & Co., New York, at least seven high-yield bond issues may be at risk of being prematurely called through a measure similar to one recently used by Minstar Inc., Minneapolis.

AmBrit Inc., Clearwater, Fla.; Maxxam Group, New York; Petroleum Heat & Power, Stamford, Conn.; Union Texas Petroleum, Houston; and United Stockyards, New York, are either nearing minimum net worth thresholds that would require the companies to begin redemptions or are in position to trigger the clauses through asset writedowns or stock buybacks.

The bond issues of these companies total more than $500 million.

Investors have been on the lookout for companies that may use net worth provisions to call in high-yield debt ever since Minstar Chairman Irwin Jacobs announced his company would use the special covenant to redeem 10% of a 14⅛% $300 million note issue.

When Minstar discovered the wording, providing for accelerating redemption, the company already was in default of the convenant, said Chris Andersen, managing director at Drexel Burnham Lambert Inc., New York. Technically, the company had to launch the call.

Still, the move infuriated investors. The notes had been trading at 113% of par prior to Mr. Jacobs' announcement, and investors had presumed they were shielded from redemption until 1990 when normal call provisions kicked in.

The possibility of more net worth-related calls "certainly does concern me," said Paul Owens, who just recently joined Morgan Stanley Asset Management, New York, to launch a junk bond management

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* June indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	1.69	20.84	35.85
Russell 3000[1]	1.49	21.46	35.67
Ryan Index[2]	3.72	13.14	25.51
Shearson Lehman Gov't./Corp.[2]	2.90	9.94	20.63

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

Marathon moves inside

5 firms terminated; U.S. Steel fund handles assets

By Barry B. Burr

USX Corp. released all five money managers of its Marathon Oil Co. unit's $600 million pension fund and turned the assets over to its U.S. Steel & Carnegie Pension Fund to run internally.

The change was made July 1, said Gary A. Glynn, president and chief investment officer of the New York-based U.S. Steel fund.

The managers terminated were: Boston Co. Institutional Investors Inc., Boston; IDS Advisory Group Inc., Minneapolis; and Jennison Associates Capital Corp., Lord Abbett & Co. and Equitable Life Assurance Society of the United States, all of New York.

USX and Marathon executives declined to disclose the amount of assets each balanced manager ran.

USX has not made a decision on Texas Oil & Gas Corp., its other major unit with a separately managed, $23 million pension fund with six outside managers. A Texas Oil executive said the possible change to internal management has been discussed.

Mr. Glynn said the Marathon move "had nothing to do with the restructuring" of the Pittsburgh-based steel and oil corporation. He said it was being planned during the past four months.

Earlier this month, U.S. Steel Corp. changed its name to USX Corp., restructuring itself with four stand-alone operating units, each responsible for its own success. The four are: Marathon, Findlay, Ohio; Texas Oil & Gas, Dallas; USS, the renamed steel firm; and U.S. Diversified Group.

"U.S. Steel's basic investment policy has been to manage money internally," Mr. Glynn said.

Virginia Saam, USX special representative-investor relations, described the change as cost effective. She declined to say how much Marathon would save in investment management fees.

The U.S. Steel & Carnegie Pension Fund has $8 billion in assets, all managed by a 15-member in-house staff.

Mr. Glynn said the fund won't need to add any staff to handle the Marathon assets.

Mr. Glynn said the managers turned over all their securities intact to the U.S. Steel fund to consummate the transfer.

The Marathon executive noted Marathon's fund was invested 80% in equities and 20% in fixed income, including a small amount in international securities.

Because of the move, Chase Manhattan Bank, New York, was changed from Marathon's master trustee to its custodian. U.S. Steel & Carnegie Pension Fund has no master trustee, Mr. Glynn said; its custodians, U.S. Trust Co. and Morgan Guaranty Trust Co., both of New York, were not affected.

Even though USX bought Marathon three years ago, Ms. Saam said, "it wasn't a problem area, so sometimes things like that aren't the thing that get sorted out in a merger right away." ■

Fiduciary insurance rates exceed claims

By Steve Hemmerick

Fiduciary liability insurance renewals are costing corporations up to two to three times more than previous policies, even though insurers don't seem to be hit with many claims on fiduciary policies.

And while the policies cost more, they are providing millions of dollars less in insurance coverage and more exclusions or loopholes. Under certain circumstances — including policy exclusions for pension plan terminations — the corporations have no fiduciary insurance at all.

Some corporate executives will hazard a guess about why costs are up, but the exact reasons elude them. They believe there should be a sharper correlation between increases of claims and costs.

At the same time, costs vary widely for fiduciary insurance. Detroit-based General Motors Corp., for example, is paying $800,000 this year for $60 million in fiduciary liability coverage, while American Information Technologies Corp., Chicago, is paying $56,000 for $50 million in coverage, according to a study by the District of Columbia Retirement Board.

Policies do differ in coverage, and the GM policy is protecting a larger pool of assets ($25 billion) than is Ameritech's, which has a $10 billion fund.

But while GM's asset pool is 2.5 times larger, the automaker is paying more than 14 times Ameritech's cost.

Patricia Benedict, risk manager for Ameritech, said she is negotiating a new policy to replace a one that is expiring. Ameritech bought a three-year policy in January 1984 that cost $56,000 to provide $50 million in coverage with a $1,000 deductible.

Now, however, Ameritech's carrier — National Union Fire Insurance Co., Pittsburgh, — can offer only $20 million in coverage because of the insurer's reduced capacity to offer that line of insurance, Ms. Benedict said.

She said she might not add coverage above the $20 million, finding that amount sufficient. Additional coverage also would be quite expensive. Under the old policy, she said, each $1 million in coverage cost $1,100. So far, quotes she has received from insurers would mean $13,000 in additional premium for each $1 million in additional coverage.

Like many other risk managers, she notes insurers aren't differentiating between good or bad loss experience in charging for liability coverage. She said she is considering an alternative, such as captive or pooled insurance risk,

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Cash is raised in quarter

By Chuck Paustian

Active equity managers raised cash during the second quarter of 1986, perhaps indicating the beginning of the end for the aging bull market.

Although the managers contacted by *Pensions & Investment Age* all said they think there is still some life left in the bull, many also said the underlying economic factors needed to support continued growth are absent.

"It's going to take better earnings and/or lower interest rates to get this thing going higher," said Robert L. Rust, vice president and trust investment officer at Hibernia National Bank, New Orleans.

According to data collected by INDATA, an investment analysis service of Gordon, Haskett & Co., Southport, Conn., institutional equity portfolios finished the second quarter of 1986 with 6.3% cash, compared with 6% at the end of the first quarter.

During the second quarter, the Standard & Poor's 500 stock index rose 5.9%.

"If the market went up and the cash (figures) went up, that means managers had more money (in cash) than before," said William T. Kennedy, a partner in the Atlanta office of INDATA.

All but one of the 10 managers tracked by *P&I Age* raised cash during the second quarter.

Alliance Capital Management Corp., New York, was the lone manager to report a lower cash position. Alliance held 4% cash as of June 30, down from a little less than 5% at the end of the first quarter.

Barbara Barringer, marketing assistant at Alliance, said the decrease in the cash position was not significant because normally it usually ranges between 4% and 6%.

Alliance manages more than $16 billion in equity assets.

The largest increase was reported by First City National Bank of Houston. First City ended the quarter with 10% cash, up from 5% at the end of the first quarter.

"We thought the market was long overdue for a correction. The market dynamics have deteriorated since March," said Ted Davis, senior vice president and chief investment officer at First City, which manages $1 billion in equity assets.

Mr. Davis said he remains "fairly optimistic" about the stock market. But he added, "At some point in time, probably within the next six months, we're going to look seriously at changing our outlook on both the equity and bond markets.

"It's getting late in the ball game."

Sit Investment Associates Inc., Minneapolis, raised its cash position to 10% at the end of the second quarter from a range of

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Hot managers aided by California moves

By Trudy Ring

Seven of the 10 managers that won the greatest amount of new business during the second quarter were beneficiaries of the $36 billion California Public Employees' Retirement System's move to external management of about $2 billion.

The managers, to be hired upon completion of fee negotiations, are Dimensional Fund Advisors, Santa Monica, Calif.; First Chicago Investment Advisors, Chicago; Lazard Freres Asset Management, New York; Atalanta/Sosnoff Capital Corp., New York; Fidelity Bank, Philadelphia; Geewax Terker & Co., King of Prussia, Pa.; and TSA Capital Management, Los Angeles.

Each will manage between $100 million and $500 million for the California system. First Chicago and TSA will be balanced managers, while the others will run equities.

Dimensional, with three other new accounts reported in *Pensions & Investment Age* during the quarter, came out the overall leader in new discretionary assets under management for the period. Rankings are based solely on accounts reported in *P&I Age*; other firms could have won more assets, but if the accounts were not reported in the publication, they are not considered in the quarterly statistics.

Dimensional's other new assignments were running $212 million, on an interim basis, for the Illinois Municipal Retirement Fund, Chicago; running $100 million for the Nevada Public Employees' Retirement System, Carson City; and managing $10 million for the Major League Baseball Players' Association pension fund, New York. All are for equity management; Dimensional uses a passive approach to man-

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'85 pension assets outpaced liabilities

By Rose Darby

Pension assets of the nation's 100 largest industrial and manufacturing companies grew more rapidly in 1985 than the companies' retirement liabilities did, a Wright Investors' Service survey shows.

Wright, of Bridgeport, Conn., conducted the survey for *Pensions & Investment Age* by examining the 1985 annual reports of the Top 100 companies (by sales) listed in Fortune magazine.

Pension assets of the 100 companies rose 8.8% in 1985, to $233.5 billion from $196.5 billion in 1984.

Total pension benefits promised to all current and former employees increased 2.3% last year, to $189.5 billion from $168.7 billion.

(Liabilities are calculated using a variety of actuarial methods and assumptions, so the comparison above is more a gauge than a precise measure.)

At the same time, the amount of pension expense borne by the Fortune 100 decreased.

Pension expense, or the amount charged against company income to fund benefit payments in 1985, totaled $10.82 billion for 1985, a 17.8% drop from the $13.17 billion recorded a year earlier.

Among reasons cited for the dramatic drop were the early adoption of Financial Accounting Standards Board statements, increases in assumed rates of return, foreign exchange rates and divestiture of corporate divisions.

Tables accompanying this story can be found on pages 16 and 17.

Only 5% of the companies (E.I. du Pont de Nemours & Co., Wilmington, Del.; Exxon Corp., New York; Johnson & Johnson, New Brunswick, N.J.; Phillips Petroleum Co., Bartlesville, Okla.; and Shell Oil Co., Houston) reported early adoption of FASB Statements 87 and 88 for their pension plans.

The statements, which must be adopted by Dec. 15, require companies to, among other things, list unfunded liabilities on the balance sheet. Now, pension assets and liabilities are found in the footnotes to the financial statement.

American Telephone & Telegraph Co., New York, reduced its pension expense 36.8% in 1985, to $657 million from $1.04 billion in 1984. The reduction primarily was due to the assumption of a higher rate of return, according to a company spokesman.

Assumed rates of return were raised to 12.5% in 1985, and will decline to 5.5% in 1998 and later years, according to the annual report. These rates are the equivalent of 6.7% on a level rate of return basis, the spokesman said.

In 1984, an assumed rate of return of 8% was used. That rate was to decline to 5% in 1998 and later years, according to the annual report. That formula was the equivalent of a level rate of 5.7%, he said.

The return used for 1985 reflected favorable earnings of plan assets in recent years, he said.

At ITT Corp., New York, there was a reduction in pension expense of 20.8% to $152 million in 1985 from $192 million in 1984.

The reduction was due to a number of factors, said Raymond Alleman, senior vice president and controller.

Prominent among these was the divestiture of a number of ITT divisions during 1985, he said.

Also, foreign exchange rates were a contributing factor because of the company's extensive overseas business activities, he explained.

Eighty-nine of the 100 companies reported their pension plans are overfunded, an increase of one from last year. Surplus assets of the 89 plans totaled about $64 billion in 1985, a 64% jump from the

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Indexing booming; up 59% in 6 months

By Ed Christman

Index fund assets snowballed to $124.96 billion as of June 30 — a 59% increase in six months — as institutional investors continued to pour money into the funds at a staggering rate.

Leading the way was Wells Fargo Investment Advisors, San Francisco, which claimed $41.1 billion in indexed assets vs. $22.9 billion six months ago.

The $124.96 billion in indexed assets was tallied by *Pensions & Investment Age* in a telephone survey. It represents an increase of nearly 59% over the $78.64 billion money managers reported to *P&I Age* as of Dec. 31.

The latest statistics also are an increase of 173% over the $45.7 billion reported to *P&I Age* as of Dec. 31, 1984.

The flight to indexing is fueled by the inability of the majority of active managers to outperform the market indexes and by the spreading acceptance among executives of large pension plans to use an indexed core approach to investment management.

Of the total assets indexed as of June 30, $101.47 billion was for equity indexing; $19.6 billion, fixed-income indexing; $2.4 billion, asset allocation indexing; and $1.6 billion, indexing strategies using options and futures.

Indexed equities grew 51.9% over the $66.8 billion reported by managers at the end of 1985. Of that, assets indexed to a "plain vanilla" Standard & Poor's 500 stock index totaled $62.8 billion. The remainder was in a variety of customized funds and international index funds.

"We are seeing a lot more interest in indexing with wrinkles," said Rick Nelson, vice president and head of the passive management group of the Bankers Trust Investment Management Group, New York. "The acceptance of those strategies reflects a trend to more esoteric index products."

The indexes tracking the Wilshire 5000; the Russell 2000 (an abbreviated version of the Russell 3000); and the BARRA Fundamental Risk Measurement Service universe (6,000 stocks) total about $5.9 billion. Other extended funds total about $19.1 billion, including $4.2 billion in small-, medium- and large-capitalization index universes.

Customized and tilted index funds, usually with active kickers, claimed $9.5 billion, while international indexing claimed almost $3 billion. Of the latter figure, State Street Bank and Trust Co., Boston, was the dominant player, claiming nearly $2.2 billion.

Asset allocation indexing claimed almost $7 billion, of which nearly $4 billion was from Wells Fargo, and is double-counted in the total stock and bond index funds. The $4 billion, however, is not doubled counted in the total indexed assets of $124.96 billion.

Fixed-income indexing grew at a slightly faster rate than equity, jumping 66% to $19.6 billion as of June 30, vs. $11.8 billion six months earlier.

Most managers expect the amount in fixed-income indexing to some day equal equity.

"There is no conceptual reason why fixed-income indexing won't one day be equal to equity," said Lyle Davis, senior vice president and chief investment officer of the asset management division of State Street Bank and Trust.

"If anything, active fixed-income managers have performed worse than active equity managers."

In the first half of 1986, Wells Fargo's domination of indexing spread to the fixed-income area as well as the West Coast juggernaut took the top spot with $7.7 billion, passing Mellon Bank, Pittsburgh, which had $4.4 billion.

Of the $19.6 billion in all fixed-income index funds, about $6.2 billion was in the Shearson Lehman bond indexes, mainly the Government/Corporate; $437 million was in the Salomon Brothers Broad Investment Grade index; $140.5 million was in Merrill Lynch's universe; and $3.1 billion in the same universes but indexed by sectors.

Other fixed-income funds totaled $9.8 billion, including $5.5 billion run by Wells Fargo in various index vehicles and $2.3 billion run by Mellon Bank in an intermediate core fixed-income index.

Although a longtime leader in indexing, Wells Fargo emerged as the dominant force during the past 1½ years, growing by leaps and bounds over Bankers Trust.

At the end of 1984, only $1 billion in indexed assets under management separated the two; Wells Fargo had $14 billion and Bankers Trust, $13 billion.

Now, Wells Fargo has nearly doubled Bankers Trust's $20.7 billion in indexed assets. ■

Top index fund managers

($ millions)

	Total indexed (as of 6/30)*	Equity	Bond	Total indexed (as of 12/31)	Equity	Bond
Wells Fargo	41,100	33,400	7,700	25,185	22,859	2,326
Bankers Trust-Investment	20,700	18,300	1,300	19,160	18,160	1,000
State Street Bank	13,115	10,802	2,013	3,812	2,733	1,079
Mellon Capital Mgmt.	12,700	10,600	0	7,400	6,920	480
American National Bank	10,000	9,000	1,000	7,977	7,177	800
Mellon Bank	5,530	1,100	4,430	3,627	0	3,627
Dimensional Fund Advisors	3,396	3,138	258	2,348	2,169	178
Manufacturers Nat'l Bank	2,731	2,731	0	1,128	570	558
Northern Trust	2,616	2,422	10	800	800	0
Alliance Capital Mgmt.	2,600	2,600	0	709	709	0
Wilshire Associates	2,115	2,115	0	2,050	2,050	0
Chase Investors Mgmt.	1,647	1,647	0	540	540	0
Prudential Asset Mgmt.	1,034	652	382	377	320	57
Lehman Mgmt.	1,029	0	1,029	750	0	750
Boston Co.	750	650	100	205	205	0
RepublicBank Dallas	457	457	0	272	252	20
Vanguard Group	450	450	0	442	442	0
T. Rowe Price Assoc.	429	0	429	125	0	125
Harris Trust	390	260	130	125	85	40
Brown Brothers Harriman	320	0	320	320	0	320
Centerre Trust-St. Louis	260	260	0	23	23	0
Great American Core	249	249	0	200	200	0
BA Investment Mgmt.	224	122	102	103	77	26
Metropolitan Life	201	84	0	120	120	0
Citicorp Investment Mgmt.	132	84	0	88	88	0
Aetna Life and Casualty	118	118	0	196	149	47
Nat'l Bank of Detroit	113	113	0	87	87	0
MacKay-Shields Financial	100	0	100	50	0	50
Griffin Group	81	0	81	65	0	65
Western Asset Mgmt.	65	0	65	25	0	25
Seafirst Bank	60	0	60	60	0	60
Putnam Advisory	50	0	50	40	0	40
Bank of New York	48	0	48	40	0	40
Gateway Investment	38	38	0	35	35	0
Trident Investment Mgmt.	33	0	0	22	22	0
General American Life	31	31	0	58	30	28
Mercantile Trust	30	30	0	25	25	0
C&S Investment Advisors	13	11	0	0	0	0
First Asset Mgmt.	3	3	0	55	2	54
Total	**124,958**	**101,487**	**19,607**	**78,644**	**66,849**	**11,795**

* Includes indexing other than pure equity or fixed-income

Source: *Pensions & Investment Age*

Harvard fund goes full tilt

By Joel Chernoff

BOSTON — Harvard Management Corp.'s "index" fund is not an index fund.

"It's a misnomer," acknowledged Walter M. Cabot, president of the company that manages Harvard University's $3.7 billion endowment. "By definition, it's a skewed product."

Nor is the $600 million core equity portfolio "passively managed," as usually described in the investment world.

Instead, Harvard — among a growing number of "index fund" adherents — actively manages its asset allocation decisions through use of the fund, tilting either toward large- or small-capitalization stocks, shifting its mix from stocks to futures or some combination of both, and reducing assets in the fund when Harvard's managers are uncertain which way the market will turn.

"We tinker with it . . . all the time," Mr. Cabot said.

Harvard uses the index fund as "a kind of core or anchor" for its equity portfolio, he said. But it is a flexible core: In theory, Harvard managers can invest anywhere from zero to 100% of its equity assets in the fund.

In practice, the fund managers have invested from 25% to a little more than 50% of the fund's equity assets in the indexed product. Currently, most of their other major equity strategies are outperforming the Standard & Poor's 500 stock index, leading Harvard

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PepsiCo pays off withdrawal liability

By Barry B. Burr

CHICAGO — PepsiCo Inc. paid the Central States Teamsters pension fund $26.1 million in withdrawal liability to comply with a court order pending the resolution of a dispute in connection with pulling employees out of the multiemployer retirement plan.

U.S. District Judge John Nordberg in Chicago ordered PepsiCo to make the interim payment. The judge left it up to arbitrators to determine PepsiCo's ultimate obligation to pay the liability.

Since 1984, PepsiCo has contested having to pay the withdrawal liability up-front while it sought to challenge any outstanding obligation to the multiemployer plan, according to a spokesman for the Purchase, N.Y.-based company.

But PepsiCo's appeal of Judge Nordberg's order in May was rejected July 11 by the 7th U.S. Circuit Court of Appeals, Chicago, forcing PepsiCo to make the interim payment.

"That money — the $26 million — has a rubber band attached to it, because it's going to come back to us," said Keith Anderson, PepsiCo's director of corporate communications.

"We're going to get that $26 million back, period. We're going to get all that money back."

Mr. Anderson said PepsiCo is arguing it owes nothing in withdrawal liability. He declined to comment further on the dispute. Other PepsiCo executives were unavailable.

Under a 1980 amendment to the Employee Retirement Income Security Act, an employer that quits a multiemployer plan must pay its share of the overall unfunded vested pension liability.

The Teamsters, Central States, Southeast and Southwest Areas Pension Fund initially sought in November 1983 $24.6 million in withdrawal liability, including principal and amortization, from PepsiCo. When the company refused to pay, the fund's trustees filed suit in January 1984 in District Court. The total amount sought now totals $33.5 million, which includes additional withdrawal liability from other PepsiCo employees leaving the fund and delinquent interest charges.

Along with the immediate $26.1 million payment, which a PepsiCo representative hand-delivered in a check to the Central States office July 14, Judge Nordberg ordered PepsiCo to pay the remaining $7.4 million in installments during the next three years.

PepsiCo's payment contrasts with the $37 million in pension expense it reported in 1985 for its company-sponsored defined benefit plans.

Nell Hennessy, an employee benefits attorney with Willkie Farr & Gallagher, Washington, who wasn't involved in the litigation, believed the payment was the largest withdrawal liability ever made.

From 1980 to 1984, according to the Central States fund, PepsiCo withdrew 4,000 employees, employed by six of its units and belonging to 63 Teamsters locals, from the multiemployer plan.

The units were: Frito-Lay Inc., Dallas; North American Van Lines Inc., Fort Wayne, Ind.; Lee Way Motor Freight Inc., Oklahoma City; Wilson Sporting Goods Co., River Grove, Ill.; Rolled Gold Foods; and Pepsi-Cola Metropolitan Bottling.

Pepsi since has sold off some of the units, now owning only Frito-Lay and Rolled Gold.

According to several ERISA attorneys not involved in the case, the 1980 amendment allows employers to contest any withdrawal liability in arbitration, only after first paying the obligation.

One attorney characterized the Central States trustees as "aggressively pursuing" employers for withdrawal liability.

The $7.3 billion fund is seeking a total of $602 million in withdrawal liability claims from 422 companies, including PepsiCo, according Michael J. Kelly, Central States executive assistant. Of the total, $383 million comes from companies under bankruptcy protection, while $219 million comes from firms not in bankruptcy filings.

Commenting on PepsiCo's payment, George W. Lehr, the fund's executive director, said, "This is a very significant and very positive development in litigation that has been going on for 2½ years.

"Although the recent court rulings do not fully conclude the PepsiCo dispute, they are a major positive step toward its ultimate resolution. They reinforce the statutory protection provided by Congress for the participants and beneficiaries of multiemployer plans."

Mr. Kelly said, "The law requires us to seek withdrawal liability when an employer withdraws. We don't have a choice. It's a fiduciary duty; the money is owed the fund.

"The purpose of that (1980) amendment was not to leave employers staying in the fund holding the bag."

The plan has about 10,000 employers contributing, he said.

The dispute still has to clear the arbitration stipulated in the ERISA amendment and Judge Nordberg has to rule on a number of issues raised by PepsiCo. ■

Corrections

• The vested funding status of **Armco Inc.** shown in the chart on page 16 of this issue is incorrect. The 1985 figure should be −$4.9 million and the 1984 figure, $40.5 million.

• **Fort Hill Investors Management Corp.** of Boston achieved a 10.4% compound annualized return on its equity investment for the Bergen Brunswig Corp. A June 23 article, relying on data supplied by the pension plan sponsor, reported a lower number.

After publication of the article, Bergen Brunswig referred inquiries about the data to a consultant retained by the company. The consultant declined to discuss the matter.

Pensions & Investment Age, after reviewing data supplied by Fort Hill, concluded the number in the article is incorrect.

• An article in the July 7 issue should have indicated trustees of the **United Mine Workers of America** 1985 Construction Workers Pension Trust picked money managers for the newly created pension fund.

• The current accounts section of *P&I Age*, published July 7, did not include the following information on hirings: **Arnhold & S. Bleichroeder International, Putnam International Advisors** and **SBC Portfolio Management International Inc.** were all hired by United Technologies Corp. to run up to $50 million each in international equities.

Opinion

Tough times ahead for savers

SOMETIMES IT ALMOST SEEMS as if Congress is deliberately sabotaging U.S. economic growth.

Though most experts agree that a key ingredient in Japan's conomic success has been its high savings rate encouraged y government policies, Congress seems intent on discouragng savings in this country.

Take, for example, the proposals in the new tax reform ills about to be reconciled by a congressional conference ommittee. The Senate bill would prevent employees covered y pension plans from making tax-deductible contributions o individual retirement accounts.

That proposal, if carried into law, must act as a deterent to savings, and studies that purport to show the money lowing into IRAs would have been saved even with the vailability of the IRA deduction fly in the face of common ense. People who believe that must believe taxes do not ffect people's behavior.

In addition, the Senate bill has a provision that will nhibit employees from making after-tax contributions to mployee benefit plans. The provision will, in effect, tax part of any voluntary after-tax contribution when withdrawn from the plan. At present, voluntary contributions can be withdrawn with incurring taxes as long as anything earned is left in the plan.

Another avenue for saving without facing a tax penalty is being closed.

Instead of taking the opportunity presented by the tax reform movement to encourage saving and discourage spending, Congress is adding to the disincentives to save.

It should have followed the Japanese's lead; they encourage savings by allowing interest earned to be tax free up to a considerable level, and discourage borrowing for consumption by not allowing interest payments to be deducted.

The Japanese clearly believe, and Congress apparently disbelieves, the old saying that if you want more of something you subsidize it and if you want less of something you tax it.

The evidence is clearly on the side of the Japanese, and if the Senate has its way, the United States will get less saving than it now has.

Overfunding becoming a memory

THE MUCH-ACCLAIMED overfunded status of the private pension system has evaporated.

Where perhaps two years ago experts estimated the private ension system as a whole was overfunded by as much as 300 billion, now the experts are estimating it is underunded by $200 billion to $300 billion.

The decline in the funded status of pension funds is a esult of the decline in interest rates in the past two years. As nterest rates decreased, the present value of the liabilities f the pension funds increased.

The impact of the interest rate decline on the present alue of the liabilities more than offset the gain in market value of fixed-income portfolios and the positive impact f the bull market on the market value of stock portfolios, he experts say.

This lends support to those who argued corporations could not claim credit for the pension surpluses, that the surpluses resulted more from the high interest rates that were brought about by high inflation, than from brilliant investment practices.

Unfortunately, few of the companies that terminated pension funds to recoup the excess assets that resulted from inflation used part of the surplus to offset the impact of inflation on retirees.

Few acknowledged they were gaining at the retirees' expense.

Because the decline in interest rates will no doubt reduce the number of overfunded pension plans that companies would be tempted to terminate, it is clearly a positive development for the private pension system.

Letters to the editor

Claims clarified

To the Editor: Richard Gilles-e's excellent May 26 article will elp focus attention on the signifiint changes I believe still are eeded in order to assure a finanally sound program for insuring ension benefits.

I would like to clarify the Pen-on Benefit Guaranty Corp.'s aims in bankruptcy because the rticle creates the impression ne of the PBGC's claims receive iority.

The PBGC files two types of aims in bankruptcy proceedings claims for unpaid contributions id claims for unfunded guaraned benefits.

Under the new law, as under ior law, the PBGC is entitled to iority for unpaid contributions at accrued either after the filing the bankruptcy petition or durg the 180 days before the filing, it these contribution claims dinarily are far less than the an's unfunded guaranteed bene-s.

Similarly, under the new law, as ider prior law, the PBGC has tax iority, and in some cases admin-rative priority (which is higher an tax priority), for unfunded aranteed benefits up to 30% of e employer's net worth.

Unfortunately, 30% of net worth dinarily is far less than funded guaranteed benefits and en is zero.

Moreover, although priority ims are treated more favorably an general unsecured claims, ey are treated less favorably an secured claims, which often consume most or all of a debtor's estate.

The new law significantly increased the face amount of the PBGC's claims by imposing additional employer liability for the excess of 75% of unfunded guaranteed benefits over 30% of employer net worth.

Thus, even when net worth is small or zero, the PBGC will have a claim for 75% of unfunded guaranteed benefits.

The problem is that Congress did not extend the Employee Retirement Income Security Act's tax priority provision to the additional employer liability claim.

Therefore, this claim may be treated as a general unsecured claim and the PBGC may collect little, if anything, on it.

In order to protect the PBGC and assure that employers take their pension promises seriously, the new liability should be given a much higher priority.

The amount of the claim also should be increased to 100% from 75% of unfunded guaranteed benefits.

Kathleen P. Utgoff
Executive director
Pension Benefit Guaranty Corp.
Washington

Fund overlooked

To the Editor: *Pensions & Investments Age*'s recent mutual fund section overlooked the so-called "fund of funds," where consultants have packaged a fund of multiple managers to market to other financial institutions who in turn market to the pension sponsors.

Beyond the questioning of the so-called Chinese Wall delineating the consultants' interests, this approach distances even further the sponsor from his/her manager and at an even greater management fee.

H. Lowell Gates

BAIMCO ownership

To the Editor: Concerning your article "Manager Sets Pace in Equity" regarding BA Investment Management International Ltd., I would like to correct one fact.

BA Investment Management International Ltd. is a subsidiary of BA Investment Management Corp. — not of Bank America Corp. as stated in the article.

Thomas B. Kelley
Chairman, BAIMCO
Director, BAIMCO Ltd.
San Francisco

Beutel Goodman

To the Editor: Beutel Goodman Capital Management Ltd., Houston, was not included in the special directory of money managers published May 19.

Beutel Goodman is at 2030 Texas Commerce Tower, Houston, Texas 77002.

As of Jan. 1, total assets under management were $1.09 billion. Of that, $1.08 billion was tax-exempt.

An equity manager, Beutel Goodman seeks companies selling at a discount to their book or asset value or companies selling at a low relative price-earnings multiple, given their investment characteristics and forecasted earnings growth.

The asset mix Jan. 1 was 90% stocks and 10% cash.

There were 30 clients, representing corporate, foundation and government accounts.

Minimum account size for separate management is $10 million.

There are three portfolio managers and eight members of the research staff.

The firm follows 75 to 100 stocks closely and 300 to 400, generally. Eighty to 90% of the research is generated internally.

Clients include Pacific Gas & Electric, Hercules, Minnesota and New York State Teachers.

The firm is affiliated with Beutel Goodman & Co., Toronto, and Beutel Goodman International PLC, London.

Robert McFarland, principal, is chief investment officer.

Prospective clients should contact the marketing unit at Fairfield Capital Associates Inc., 1720 Post Road E, Westport, Conn. 06880; (203) 254-1215.

Barbara Greer
Administrative assistant
Fairfield Capital Associates
Westport, Conn.

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Underwriting rankings: Jan. 1-June 30, 1986
(Full credit to lead manager)

ower rates elp issuers op '85 mark

By Marci Baker

EW YORK — Sparked by the sharp o in interest rates earlier this year, corate issuers raised more money during first half of 1986 than they did in all of rd-breaking 1985.

ccording to IDD Information Services, . issuers raised $144.3 billion in the estic markets during the six-month od, compared with $138.3 during the re 1985 calendar year.

he strong stock market, meanwhile, led rush of common equity issues. Corations raised more than $23.3 billion in stock market during the first half, htly less than the $24.7 billion gened in 1985, according to IDD.

alomon Brothers Inc. continued to dome the overall domestic underwriting e in the United States, as lead man- for $28.7 billion of the total volume. First Boston Corp. followed, with a 1 billion market share.

rexel Burnham Lambert Inc., which ed fifth in 1985, moved to No. 3, largely he strength of its junk bond undering activities. A large portion of the billion credited to Drexel came from its manager role in such deals as the $2.5 on BCI Holdings Inc., Chicago, offering a $2.5 billion debt offering by Occital Petroleum Corp., Los Angeles.

oldman, Sachs & Co. slipped to fifth e (from third in 1985), and Merrill ch Capital Markets lost its 1985 fourth e seat to Morgan Stanley & Co., which aged $15.8 billion in 137 issues in the half.

vestment bankers generated their marshare in the first half largely through underwriting of straightforward bond es rather than through the introducof securities with esoteric features.

DD's statistics showed new fixed-rate d offerings, excluding convertibles and rtgage-related deals, totaled $86.4 on in the first half of the year, up 11% n the $77.8 billion issued during all of 5. Floating rate new issues totaled only billion in the first six months vs. $7.3 on last year.

ebt issuers also continued to rely more onger term issues.

a breakdown of the fixed rate volume ength of maturity, longer term issues layed the greatest surge over 1985 ls. Issues with maturities of 11 years onger climbed to $37.6 billion, a 43.5% ease from the $26.2 billion reported in 5. Meanwhile, volume dropped mark- among issues due in three years or . There, first half volume totaled $8 on, down 21.6% from the $10.2 billion ed last year.

ow interest rates enabled issuers to e money through cheap financings. Yet h of the new issue bond volume was rated to refinance older, higher coupon

I. Du Pont de Nemours & Co., Wilgton, Del., for example, made a rare to the domestic debt markets earlier year to raise $300 million in a 30-year carrying an 8.5% interest rate. It used of the proceeds to refinance outstandebt at more than 12%.

anufacturers Hanover Corp., New , used proceeds of two offerings total- $300 million to call in high-coupon of Manufacturers Hanover Overseas tal Corp. The new seven and 10-year es carried rates of 9.15% and 8⅞%, ectively. One Eurobond issue that was ed carried a 13% rate, said Dennis ary, senior vice president and finance tor for the corporation.

Corp., New York, also issued its first debt deals since 1981 — $150 million -year securities paying 8⅜% and $100 on of seven-year notes with a 7⅛% est rate — in part to refinance outstanding issue carrying rates of 9.5% and 12⅛%, said Michael Ganz, vice president-associate treasurer.

Overall, corporations announced plans to redeem more than $19.2 billion in outstanding debt during the first half of the year, said Nancy Kimelman, an economist at Salomon Brothers. Just more than $9 billion of that came from utilities, where refinancing opportunities have been the greatest.

Ms. Kimelman and others on Wall Street think the high-water mark on corporate debt refunding has been reached. "Most corporations that have been inclined to refinance have already done so," said Greg Parseghian, vice president in fixed-income research at First Boston.

Meanwhile, issuers aren't presenting investors with non-call offerings as frequently as they were at the first of the year when fears over call risk were at their peak. Those issuers that are coming to market are finding investors less willing to give up yield in exchange for the call protection.

At the beginning of the year, corporations could shave 25 to 30 basis points from the interest cost of a new bond issue by attaching a non-call feature. "Now he's lucky if he gets 10 to 15 basis points," one banker noted.

Even so, investor concerns over call risk haven't dissipated. Heightened awareness that high-coupon bonds can be called, along with the surge in supply, are fueling the current wide spreads between corporate and Treasury issues. Spreads are expected to remain wide, so it will be somewhat more expensive to issue debt than it was earlier this year.

Supply is expected to remain heavy, although few expect volume in the second half to match that of the first half.

Continued on page 15

All Issues

U.S. market

	Firm	$ mil.	Issues
1.	Salomon Brothers	28,713.0	245
2.	First Boston	20,081.7	235
3.	Drexel Burnham	18,034.7	127
4.	Morgan Stanley	15,760.8	137
5.	Goldman, Sachs	14,965.0	139
6.	Merrill Lynch	13,828.6	154
7.	Shearson Lehman	8,059.2	107
8.	Kidder, Peabody	3,952.8	74
9.	Prudential-Bache	2,278.2	28
10.	PaineWebber	2,163.5	62
11.	Smith Barney	1,932.0	29
12.	Bear, Stearns	1,907.5	37
13.	Lazard Freres	1,681.9	9
14.	E.F. Hutton	1,663.3	26
15.	Dean Witter	1,344.5	24

Euromarket*

	Firm	$ mil.	Issues
1.	CSFB[1]	2,906.4	17
2.	Salomon Brothers	2,443.2	18
3.	Merrill Lynch	2,419.9	15
4.	Nomura Securities	2,039.3	14
5.	Morgan Stanley	1,276.5	7
6.	Daiwa Securities	999.9	7
7.	Morgan Guaranty	967.9	13
8.	Goldman, Sachs	953.5	6
9.	Nikko Securities[2]	940.3	7
10.	Banque Paribas	925.5	12
11.	Union Bank/Switz.	877.0	9
12.	Credit Suisse	741.0	5
13.	LTC Bank/Japan	713.0	6
14.	Shearson Lehman	671.1	6
15.	Deutsche Bank	483.4	3

Worldwide**

	Firm	$ mil.	Issues
1.	Nomura Securities	8,263.6	70
2.	CSFB[1]	7,802.9	55
3.	Deutsche Bank	7,682.2	49
4.	Daiwa Securities	4,988.6	51
5.	Salomon Brothers	4,887.8	32
6.	Banque Paribas	4,407.9	46
7.	Union Bank/Switz.	4,368.0	43
8.	Morgan Guaranty	4,356.1	36
9.	Nikko Securities[2]	3,663.8	34
10.	Morgan Stanley	3,450.9	34
11.	Merrill Lynch	3,220.8	25
12.	Yamaichi	2,287.4	29
13.	Swiss Bank	2,263.7	23
14.	S.G. Warburg	1,906.5	16
15.	Goldman, Sachs	1,862.8	14

Bond Issues

Straight debt

	Firm	$ mil.	Issues
1.	Salomon Brothers	23,899.9	195
2.	First Boston	18,449.5	211
3.	Drexel Burnham	13,645.3	64
4.	Morgan Stanley	12,346.5	97
5.	Goldman, Sachs	11,723.0	95
6.	Merrill Lynch	10,413.7	87
7.	Shearson Lehman	5,843.9	69
8.	Kidder Peabody	2,332.9	40
9.	PaineWebber	1,585.4	40
10.	Bear, Stearns	1,460.5	24
11.	E.F. Hutton	1,237.8	13
12.	Smith Barney	1,181.9	10
13.	Dillon, Read	844.6	8
14.	Dean Witter	752.8	12
15.	Prudential-Bache	477.9	11

Convertible debt

	Firm	$ mil.	Issues
1.	Drexel Burnham	1,804.5	29
2.	First Boston	910.0	11
3.	Merrill Lynch	838.8	12
4.	Morgan Stanley	415.0	6
5.	Goldman, Sachs	385.0	7
6.	Kidder, Peabody	345.0	5
7.	Donaldson, Lufkin	302.0	6
8.	Shearson Lehman	295.0	5
9.	L.F. Rothschild	205.0	4
10.	Smith Barney	185.0	4
11.	Robinson-Humphrey	130.0	5
12.	Dean Witter	122.0	4
13.	Alex. Brown	115.0	3
14.	Montgomery Securities	100.0	1
15.	Dillon, Read	94.0	2

Junk bonds

	Firm	$ mil.	Issues
1.	Drexel Burnham	9,384.6	37
2.	Merrill Lynch	1,499.0	10
3.	Shearson Lehman	944.1	5
4.	First Boston	934.7	6
5.	E.F. Hutton	547.9	3
6.	Bear, Stearns	399.9	3
7.	Salomon Brothers	375.3	4
8.	Goldman, Sachs	373.9	5
9.	Morgan Stanley	314.6	5
10.	Prudential-Bache	314.2	3
11.	Kidder, Peabody	309.7	3
12.	Donaldson, Lufkin	157.1	3
13.	L.F. Rothschild	75.0	2
14.	PaineWebber	64.0	1
15.	Dillon, Read	45.0	1

Stock Issues

Common stock

	Firm	$ mil.	Issues
1.	Salomon Brothers	3,273.1	30
2.	Goldman, Sachs	2,103.9	27
3.	Merrill Lynch	2,036.1	47
4.	Morgan Stanley	1,998.7	18
5.	Prudential-Bache	1,725.3	16
6.	Shearson Lehman	1,497.7	27
7.	Lazard Freres	1,409.3	7
8.	Drexel Burnham	1,076.9	27
9.	Kidder, Peabody	899.9	24
10.	Smith Barney	615.1	15
11.	First Boston	529.7	10
12.	Alex. Brown	509.5	20
13.	PaineWebber	438.1	19
14.	Dean Witter	469.7	8
15.	Donaldson, Lufkin	463.5	16

Preferred stock

	Firm	$ mil.	Issues
1.	Drexel Burnham	1,508.0	7
2.	Salomon Brothers	1,455.0	18
3.	Morgan Stanley	1,000.0	16
4.	Goldman, Sachs	753.0	10
5.	Merrill Lynch	540.0	8
6.	Shearson Lehman	422.5	7
7.	First Boston	192.5	3
8.	Lazard Freres	125.0	1
9.	Alex. Brown	75.0	1
10.	E.F. Hutton	75.0	1
11.	Prudential-Bache	75.0	1
12.	Kidder, Peabody	50.0	2
13.	Jesup & Lamont	10.5	1
14.	Baer & Co.	9.0	1
15.	McKinley, Allsopp	8.0	1

IPOs

	Firm	$ mil.	Issues
1.	Prudential-Bache	1,476.3	6
2.	Lazard Freres	1,237.5	2
3.	Merrill Lynch	703.1	19
4.	Drexel Burnham	623.3	13
5.	Morgan Stanley	419.0	6
6.	Smith Barney	355.7	8
7.	Shearson Lehman	336.7	8
8.	PaineWebber	304.4	10
9.	Dean Witter	272.0	2
10.	Salomon Brothers	242.1	5
11.	Alex. Brown	234.2	10
12.	First Boston	219.7	4
13.	Donaldson, Lufkin	210.7	9
14.	Goldman, Sachs	194.9	4
15.	L.F. Rothschild	174.9	3

[1] Credit Suisse First Boston
[2] Europe

* U.S. issuers only; also includes overseas offerings outside of Europe
** Includes U.S. and foreign issuers

Source: IDD Information Services, N.Y.

Low interest rates . . .

Continued from page 14

Rates are still considerably lower than they were a year ago, and corporations are still looking to lock in cheap financing for existing, as well as future, financing needs, bankers said.

Indeed, Hospital Corp. of America, Nashville, Tenn., is inclined to do more plain vanilla financing before the year is out.

"We're under what we've budgeted for interest costs," said William McInnis, vice president of finance. "If the market cooperates, we would do another $200 million to $300 million in financing this year."

In the spring, Hospital Corp. raised $300 million in 10-year and 30-year bond offerings at 8% and 9%, respectively. Proceeds were used to reduce commercial paper, which now stands at $900 million.

On the equity side, a key contributor to the soaring volume was the rush of initial public offerings. At $8.8 billion, IPO volume hit a new high in the first half, compared with $8.6 billion for all of 1985.

Salomon took over the lead in the common equity arena in the first half, pushing Goldman, Sachs into second place.

Salomon led underwriters in 30 equity offerings totaling $3.3 billion, while Goldman ended the six-month period with 27 deals totaling $2.1 billion.

Merrill Lynch ranked third, managing just more than $2 billion, followed closely by Morgan Stanley, with slightly less than $2 billion.

The surprise in the equity rankings was Prudential-Bache Securities, which rose to fifth from 16th in 1985, a jump due to its lead in IPOs. Pru-Bache acted as lead underwriter on equity deals of $1.7 billion, including $1.5 billion in IPOs.

Lazard Freres & Co., buoyed by its lead-manager role in the $1.2 billion IPO by The Henley Group, was second in the IPO rankings.

With U.S. corporations focusing on the domestic markets, overseas financing was less active.

U.S. issuers raised $24.7 billion in public Eurobond and other foreign bond offerings during the first half of 1986, vs. $38.7 billion for all of last year, according to IDD. When foreign issuers were included in the tally, volume reached $103 billion, compared with $147.8 billion in 1985.

Credit Suisse First Boston took the top underwriting spot for overseas offerings by U.S. issuers, managing almost $3 billion. Salomon was second, with $2.4 billion.

Nomura Securities took the lead for Eurobond and other foreign bond offerings for all issuers. It was book manager for $8.3 billion of the total for the first half, while Credit Suisse First Boston, last year's front-runner, managed $7.8 billion.

Among other first half underwriting highlights were:

- All industry segments in the domestic arena displayed sizable gains, with industrial and utility companies exceeding 1985 financing levels. Industrial companies raised $60.8 billion vs. $55 billion in 1985. Utilities raised $18.4 billion, up from $13.6 billion last year. Finance companies raised the most capital in the first half — $62.7 billion — but fell short of 1985 financing volume by about $3 billion.
- Non-convertible debt volume climbed to $107.3 billion for the first half, up from $97.5 billion in 1985. Convertible debt volume totaled more than $7 billion vs. $7.4 billion last year.

Salomon led underwriters on non-convertible issues, capturing 22.3% of that market. First Boston ranked second, with 17.2%, and Drexel, third, with 12.7%.

Drexel took the lead in the convertible arena, managing 25.6% of the volume generated. It was followed by First Boston, 12.9%, and Merrill Lynch, 11.9%.

- High-yield bond volume grew to almost $16 billion, up from the $14.8 billion raised by non-investment grade issuers in all of 1985. Drexel captured just less than 60% of that market. Merrill Lynch, which ranked eighth last year, jumped to second, with 9.5%. Another big gainer in the first half was E.F. Hutton & Co. Inc., whose 3.5% market share placed it fifth in the rankings, up from 10th in 1985. Salomon, which placed second in 1985, fell to seventh place during the first half.
- Salomon led in the mortgage-related new issues market, where first-half volume of $21 billion exceeded the total for all of 1985 by about $1.2 billion. Salomon held the lead underwriting role underwriting a total of $7 billion. While First Boston managed $6.1 billion and Merrill Lynch, $1.9 billion.

In the biggest climb, Morgan Stanley moved to fourth from ninth, underwriting $1.2 billion.

- Total preferred stock volume in the first half was $6.6 billion, $5 billion of which represented straight preferred offerings and $1.6 billion convertible preferred issues. Issuers raised $8.6 billion in preferred stock deals during 1985.

The $1.2 billion preferred stock deal issued by Fox Television Studios put Drexel in front, with a 22.7% share of the market. Coming in a close second was Salomon, which captured 22% of the volume.

- Shearson Lehman Brothers Inc. witnessed an erosion of its dominance in the auction-rate preferred stock arena, which it pioneered two years ago. The firm placed fourth, underwriting $422.5 million of the $2.7 billion issued during the first half. Salomon was first, with $850 million, followed by Morgan Stanley, $730 million, and Goldman, Sachs, $475 million. ■

Biotech . . .

Continued from page 13

$5.25 in December.

Only three of 27 biotechnology stocks have posted declines in six months ended June 30, according to data prepared by L.F. Rothschild.

Commenting on price movements of stocks on the Rothschild list, analyst Teena L. Lerner said it was "an amazing performance — well in excess of the market even though the market was good."

Kidder, Peabody's list of 25 biotechnology stocks rose 88% in 1985 and 70% so far this year, said Mr. Drake.

But there are risks to investors. Many of the companies depend on contracts with large pharmaceutical firms, and few boast financial statements that show substantial profits.

Syntro, for example, suffered a 2 cent-per-share loss in 1985 and a 3-cent loss in 1984. Quidel posted a per share loss of $6.19 in 1985 and a $5.03 loss the previous year.

Genentech, the biggest firm in the industry, produced earnings of 18 cents per share in 1985. Genentech became the first biotechnology company to bring a product to market when, in 1985, it introduced Protropin, a human growth hormone used in the treatment of children who suffer from growth hormone deficiency.

In 1982, Genentech introduced the first recombinant-produced insulin, Humulin, under a licensing agreement with Eli Lilly.

Revenue from sales continues to be meager for many biotechnology companies.

Biotechnology companies also face the difficulties of coping with government regulation, the pros-

"I want to buy a home. *I don't care if it's a condo, townhouse, flat, studio, brick, wood, new, old ... I just want to buy something that's mine, something I can point to and say, 'here, this is my home, I bought it, it's mine, want to come inside and see my kitchen?' And with one more raise, I can do it.*"

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Pension funds, balance sheets

Company	Total pension liabilities $ mil.	Vested benefits $ mil.	Fund assets $ mil.	Vested funding status $ mil. 1985	Vested funding status $ mil. 1984	Assumed rate of return (%) 1985	Assumed rate of return (%) 1984	Net worth $ mil.	1985 vested funding status as percentage of net worth	Pension assets as percentage of net worth	Corporate assets $ mil.	Pension assets as percentage of corporate assets	Pension expense $ mil.	Operating income $ mil.	Pension expense as percentage of adjusted operating income
Allied Signal	3,213.0	2,983.0	3,815.0A	832.0	208.0	8.0/9.0	8.0	5,811.0	14.3	65.7	13,271.0	28.7	150.0	895.0	14.4
Aluminum Co. of Amer.	2,116.5	1,939.4	2,034.6	95.2	68.4	8.3	9.8	3,241.9	2.9	62.8	6,353.6	32.0	148.4	261.2	36.2
Amerada Hess	79.7	75.6	151.1	75.5	73.5	9.0	9.0	2,228.3	3.4	6.8	6,219.5	2.4	0.8	981.7	0.1
American Brands	505.9	482.6	484.2	1.6	12.9	8.6	8.6	2,374.0	0.1	20.4	4,926.1	9.8	59.2	691.8	7.9
American Home	—	—	—	—	—	—	—	2,286.6	—	—	3,395.2	—	26.2	1,151.7	2.2
American Motors	685.7	596.9	353.3	−243.6	−383.2	9.6	7.0	149.2	−163.3	236.8	2,000.9	17.7	56.8	−47.0	M
Amoco	1,523.0	1,475.0	1,913.0	438.0	101.0	8.0	8.0	11,588.0	3.8	16.5	25,198.0	7.6	123.0	3,907.0	3.1
Anheuser-Busch	297.2	265.9	498.7	232.8	210.2	8.5	8.5	2,173.0	10.7	22.9	5,121.4	9.7	78.7	832.3	8.6
Archer Daniels	71.8	61.1	80.1	19.0	19.6	8.0	8.0	1,803.4	1.1	4.4	2,967.1	2.7	7.5	240.6	3.0
Armco	1,585.5	1,508.8	1,314.1A	−194.7	83.5	8.5/13.5	8.5/13.5	1,018.0	−19.1	129.1	3,293.3	39.9	84.9	127.1	M
Ashland Oil	259.8	239.2	522.6	283.4	255.5	9.7	8.9	929.4	30.5	56.2	3,927.6	13.3	4.6	336.5	1.3
AT&T Technologies	14,643.5	12,634.1	18,682.3	6,048.2	5,487.0	6.7	6.7	14,633.3	41.3	127.7	40,462.5	46.2	657.1	2,986.1	18.0
Atlantic Richfield	1,558.0	1,474.0	2,020.0	546.0	546.0	8.5	8.5	5,361.3	10.2	37.7	20,279.0	10.0	122.0	2,782.0	4.2
Bethlehem Steel	3,460.0	3,347.7	2,314.8	−1,032.9	−976.7	10.0/14.3	8.0/14.3	786.3	−131.4	294.4	4,742.6	48.8	197.8	5,200.0	3.7
Boeing	2,788.0	2,547.0	3,971.0	1,424.0	801.0	8.5	8.5	4,364.0	32.6	91.0	9,246.0	42.9	205.0	583.0	26.0
Borden	252.6	234.5	306.9	72.4	67.4	7.8/11.1	8.3	1,407.3	5.1	21.8	2,932.2	10.5	14.8X	373.3	3.8
Borg Warner	417.9	400.9	455.7	54.8	36.4	9.0	9.0	1,649.6	3.3	27.6	2,822.6	16.1	45.4	297.1	13.3
Bristol Myers	292.0	253.0	477.7	224.7	196.1	9.8	8.5	2,442.7	9.2	19.6	3,721.2	12.8	13.7	757.1	1.8
Burroughs	568.9	545.3	760.8	215.5	119.7	9.3	9.0	2,492.4	8.6	30.5	4,556.4	16.7	40.0	427.0	8.6
Campbell Soup	279.1	268.7	344.8	76.1	120.5	9.0	9.0	1,382.5	5.5	24.9	2,437.5	14.1	23.6	365.8	6.1
Caterpillar	2,326.0	2,202.0	3,033.0	831.0	393.0	9.0/10.7	7.5/9.0	3,068.0	27.1	98.9	6,016.0	50.4	60.0	302.0	16.6
Champion Int'l.	704.4	643.5	747.1	103.6	134.8	9.3	9.0	2,422.9	4.3	30.8	6,098.1	12.3	43.2	363.8	10.6
Chevron	2,966.0	2,823.0	3,741.0	918.0	771.0	8.0	8.0	15,554.0	5.9	24.1	38,899.0	9.6	181.0	4,587.0	3.8
Chrysler	4,110.5	3,502.1	2,920.6A	−581.5	−344.7	10.0	9.0	4,215.3	−13.8	69.3	12,605.3	23.2	219.8X	1,947.3	10.1
Coastal Corp.	242.5	220.3	371.5	151.2	72.2	8.0	8.0	637.4	23.7	58.3	8,294.3	4.5	23.9	632.6	3.6
Coca-Cola Co.	261.5	236.9	351.3	114.4	116.8	9.0	9.0	2,979.1	3.8	11.8	6,897.7	5.1	42.0	1,045.4	3.9
Colgate-Palmolive	503.8	479.3	676.5	197.2	191.7	8.7	8.5	894.5	22.0	75.6	2,814.0	24.0	14.1X	276.8	4.8
Con Agra	82.0	68.6	98.1	29.5	26.3	8.0	8.0	458.3	6.4	21.4	1,547.1	6.3	9.6	193.9	4.7
CPC Int'l.	267.5	253.8	246.0	−7.8	−36.7	8.0	8.0	1,371.9	−0.6	17.9	3,016.6	8.2	30.8	349.6	8.1
Dana Corp.*	730.0	680.5	669.3	−11.2	−9.1	8.0/9.0	8.0/9.0	1,194.8	−0.9	56.0	2,424.3	27.6	43.2	373.9	10.4
Dart & Kraft	752.1	718.1	1,063.3	345.2	385.8	8.0	8.0	2,880.2	12.0	36.9	5,501.8	19.3	24.4	870.6	2.7
Deere & Co.	1,540.0	1,460.0	1,695.0	235.0	365.0	9.0	9.0	2,258.6	10.4	75.0	5,462.2	31.0	79.0	−25.2	M
Diamond Shamrock	140.0	136.3	192.2	55.9	16.6	9.5	9.5	1,483.1	3.8	13.0	4,618.0	4.2	14.7	438.2	3.2
Digital Equipment	196.6	158.4	461.6	303.2	256.6	6.0	6.0	4,554.6	6.7	10.1	6,368.9	7.2	114.1	449.8	20.2
Dow Chemical	1,596.0	1,446.0	1,654.0	208.0	124.0	8.0	8.0	4,792.0	4.3	34.5	11,830.0	14.0	150.0	637.0	19.1
Dresser Industries	697.3	624.1	874.2	250.1	194.9	8.8	8.8	1,646.2	15.2	53.1	3,224.5	27.1	28.9	103.6	21.8
Du Pont (G)	5,754.0	5,631.0	8,359.0	2,728.0	2,665.0	9.4	9.4	12,391.8	22.0	67.5	25,140.0	33.2	−52.0X	3,725.0	−1.4
Eastman Kodak	2,867.0	2,819.0	4,039.0	1,220.0	1,341.0	9.0	9.0	6,562.0	20.4	61.6	12,142.0	33.3	104.0	1,124.0	8.5
Emerson Electric	248.7	215.7	403.0	187.3	162.8	9.2	8.8	2,222.2	7.3	18.1	3,256.8	12.4	31.5	739.5	4.1
Exxon (G)	5,458.0	5,099.0	8,985.0	3,886.0	2,920.0	9.8	9.9	29,096.0	13.4	30.9	69,160.0	13.0	−93.0X	10,123.0	−0.9
Firestone Tire*	465.0	443.0	367.0	−76.0	167.0	11.2	11.0	1,163.0	−6.5	31.6	252.8	145.2	24.0	79.0	23.3
Ford Motor	10,970.0	9,180.0	10,620.0	1,440.0	−220.0	8.0	8.0	12,030.6	12.0	88.3	31,365.6	33.9	538.6	2,729.7	16.5
General Dynamics	1,668.4	1,564.6	1,992.7	428.1	379.1	8.0	7.0	1,335.8	32.0	149.2	4,448.1	44.8	106.7	668.0	13.8
General Electric	9,508.0	8,764.0	14,727.0	5,963.0	3,364.0	8.0/13.4	7.5/13.4	13,904.0	42.9	105.9	26,432.0	55.7	496.0	2,935.0	14.5
General Foods	965.2	911.4	1,426.1	514.7	563.7	7.5	7.5	1,940.2	26.5	73.5	4,553.7	31.3	56.2X	625.4	8.2
General Mills	352.0	318.0	456.0	138.0	133.0	4.0/9.8	4.0/9.5	1,023.3	13.5	44.6	2,662.6	17.1	39.2	331.9	10.6
General Motors	26,742.4	23,368.5	25,485.7	2,117.2	149.2	8.5/8.8	8.3/10.3	25,949.2	8.2	98.2	63,642.6	40.0	1,674.8	4,214.4	28.4
Georgia-Pacific	283.0	260.0	386.0	126.0	43.0	7.5	7.5	2,147.0	5.9	18.0	4,866.0	7.9	35.0	422.0	7.7
Goodyear Tire	2,079.2	1,922.6	2,250.5	327.9	309.9	8.0	8.5	3,507.4	9.3	64.2	6,953.5	32.4	65.6	480.4	12.0
Grace (W.R.)	301.5	288.1	560.0	271.9	192.9	7.1	7.1	2,404.5	11.3	23.3	5,420.9	10.3	19.0	215.0	8.1

Definitions

Total pension liabilities:
The actuarial present value of benefits promised to all past and present employees based on service already performed.

Vested benefits:
The present value of all benefits accrued by employees who have worked long enough with the company to have a legal right to the benefits.

Fund assets:
The market value of the assets that have been set aside to fund pension benefit payments.

Vested funding status:
Fund assets minus vested benefits. Overfunded plans have a positive status; plans with an unfunded vested liability have a negative status.

Assumed rate of return:
The weighted average interest rate the company's actuary uses in deriving the present value of total pension benefits.

Net worth:
The amount of equity available for stockholders as shown on the company's balance sheet.

Adjusted operating income:
Operating income plus pension expense.

and income statements: 1985 (See related story — page 3)

Company	Total pension liabilities $ mil.	Vested benefits $ mil.	Fund assets $ mil.	Vested funding status $ mil. 1985	Vested funding status $ mil. 1984	Assumed rate of return (%) 1985	Assumed rate of return (%) 1984	Net worth $ mil.	1985 vested funding status as percentage of net worth	Pension assets as percentage of net worth	Corporate assets $ mil.	Pension assets as percentage of corporate assets	Pension expense $ mil.	Operating income $ mil.	Pension expense as percentage of adjusted operating income
Heinz (H.J)	214.2	179.7	246.0	66.3	59.7	9.0	9.0	1,225.7	5.4	20.1	2,473.8	9.9	30.8	491.5	5.9
Hewlett-Packard	725.0	554.0	896.0	342.0	304.0	8.0	8.0	3,982.0	8.6	22.5	5,680.0	15.8	86.0	758.0	10.2
Honeywell	1,203.0	1,041.3	1,400.0	358.7	199.1	8.5/14.5	8.0/14.5	2,566.9	14.0	54.5	5,033.7	27.8	103.9	454.3	18.6
IC Industries	364.8	340.9	435.8	94.9	82.8	9.0	8.0	1,638.6	5.8	26.6	4,818.4	9.0	22.2X	421.1	5.0
Int'l. Bus. Machines	7,383.0	7,064.0	14,842.0	7,778.0	4,428.0	6.0/8.0	5.5/7.5	31,990.0	24.3	46.4	52,634.0	28.2	868.0	11,230.0	7.2
Int'l. Paper	899.0	845.0	1,177.0	332.0	223.0	8.5	8.0	3,195.0	10.4	36.8	6,039.0	19.5	4.0	207.0	1.9
ITT	1,995.9	1,819.3	2,105.1	285.8	343.1	9.0	9.0	5,848.9	4.9	36.0	14,272.5	14.7	152.0	563.6	21.2
Johnson & Johnson (G)	417.4	388.8	801.0	412.2	284.9	8.5	8.0/8.5	3,350.9	12.3	23.9	5,095.1	15.7	51.6	840.0	5.8
Kimberly Clark	459.8	445.2	545.2	100.0	128.9	NA	NA	1,743.9	5.7	31.3	3,503.8	15.6	29.1	486.3	5.6
Litton Ind.	613.0	594.0	NA	NA	NA	7.0	7.0	931.1	—	—	4,646.3	—	40.3X	409.6	9.0
Lockheed Corp.	2,790.0	2,684.0	3,905.0	1,221.0	846.0	7.9	8.5	1,511.0	80.8	258.4	4,184.0	93.3	159.0	733.0	17.8
LTV	3,443.9	3,216.6	2,978.2	−238.4	−236.4	10.0	10.0	364.3	−65.4	817.5	6,306.7	47.2	184.8	−119.3	M
Martin Marietta	1,108.0	980.0	1,398.0	418.0	361.0	4.0/9.3	4.0/10.5	708.0	59.0	197.5	2,258.1	61.9	90.8	293.7	23.6
McDonnell Douglas	2,295.0	2,001.7	3,211.0	1,209.3	1,282.3	8.0	8.0	2,634.6	45.9	121.9	7,268.4	44.2	173.3	448.3	27.9
3M	1,031.0	780.0	1,400.0	620.0	506.0	8.5	8.0	4,008.0	15.5	34.9	6,593.0	21.2	61.0	1,150.0	5.0
Mobil	2,133.0	2,071.0	3,236.0	1,165.0	889.0	9.0	9.0	14,089.0	8.3	23.0	41,752.0	7.8	190.0	5,344.0	3.4
Monsanto	2,148.0	1,994.0	2,672.0	678.0	520.0	8.5	7.5	3,407.0	19.9	78.4	8,877.0	30.1	85.0	351.0	19.5
Motorola	136.0	120.0	286.0	166.0	164.0	8.0	7.0	2,284.0	7.3	12.5	4,370.0	6.5	0.0	121.0	0.0
NCR	891.1	821.6	1,353.3	531.7	302.3	8.3	8.1	2,318.3	22.9	58.4	3,939.8	34.3	50.7X	540.0	8.6
North Amer. Phillips	365.6	327.9	642.9	315.0	317.4	9.0	9.0	1,050.6	30.0	61.2	2,643.0	24.3	32.5	198.1	14.1
Northrop	862.9	725.1	1,210.6	485.5	444.1	6.0	6.0	899.0	54.0	134.7	2,332.7	51.9	135.8	307.8	30.8
Occidental Petroleum	126.1	122.2	140.0	17.8	25.8	8.0	8.0	2,947.6	0.6	4.7	11,585.9	1.2	4.0	1,038.1	0.4
PPG Industries	813.8	785.6	921.2	135.6	57.2	9.0	9.0	1,705.3	8.0	54.0	4,083.8	22.6	15.0	557.7	2.6
Pepsico	390.3	303.3	469.0	165.7	164.6	7.0	7.0	1,837.7	9.0	25.5	5,861.2	8.0	37.0	737.1	4.8
Pfizer	391.2	363.8	422.3	58.5	98.0	7.5	7.5	2,927.3	2.0	14.4	4,462.9	9.5	48.9	880.0	5.3
Philip Morris	1,654.0	1,562.0	2,361.0	799.0	291.0	7.5	7.5	4,737.0	16.9	49.8	17,429.0	13.5	100.0	2,714.0	3.6
Phillips Petroleum (G)	727.0	688.0	1,454.0	766.0	787.0	9.3	8.0	1,644.0	46.6	88.4	14,045.0	10.4	−53.0	2,455.0	−2.2
Pillsbury	181.5	163.5	298.2	134.7	90.8	9.0/15.3	8.0/15.3	1,165.4	11.6	25.6	2,778.5	10.7	7.8	393.2	1.9
Procter & Gamble (B)	—	—	—	—	—	—	—	5,272.0	—	—	9,683.0	—	—	976.0	—
RJR-Nabisco	1,534.0	1,331.0	1,856.0	525.0	420.0	8.5	8.0	4,796.0	10.9	38.7	16,930.0	11.0	81.0	2,163.0	3.8
Ralston Purina	381.2	341.4	541.4	200.0	229.5	8.0	6.0	924.5	21.6	58.6	2,637.3	20.5	60.0	594.2	9.2
Raytheon Co.	1,029.9	967.2	1,151.5	184.3	228.9	7.0	7.0	1,929.0	9.6	59.7	3,441.0	33.5	81.8	490.6	14.3
Rockwell Int'l.	3,740.0	3,320.0	4,469.0	1,149.0	1,230.0	8.0	8.0	2,931.8	39.2	152.4	7,332.8	60.9	177.7	1,028.6	14.7
Sara Lee Corp.	177.7	147.6	217.8	70.2	61.0	8.5	7.0	991.0	7.1	22.0	3,215.8	6.8	22.3	394.1	5.4
Shell Oil (G)	1,882.0	1,684.0	2,549.0	865.0	592.0	8.8	9.5	14,129.0	6.1	18.0	26,528.0	9.6	24.0	4,013.0	0.6
Sperry Corp.	1,019.1	942.7	1,463.4	520.7	385.0	8.0	8.0	3,001.1	17.4	48.8	5,773.4	25.3	52.9	460.9	10.3
Std. Oil (Ohio)	923.0	854.0	1,116.0	262.0	360.0	8.0/13.0	8.0/13.0	8,018.0	3.3	13.9	18,330.0	6.1	148.0	2,874.0	4.9
Sun Company	1,092.0	1,011.0	1,344.0	333.0	404.0	9.5	9.5	5,240.0	6.4	25.6	12,923.0	10.4	83.0	927.0	8.2
Tenneco	979.0	883.0	1,191.0	308.0	261.0	7.6	7.6	5,903.0	5.2	20.2	20,437.0	5.8	107.0	1,318.0	7.5
Texaco	940.0	826.0	1,333.0	507.0	714.0	9.0	8.2	13,628.0	3.7	9.8	37,703.0	3.5	171.0	3,991.0	4.1
Texas Instruments	382.3	319.7	577.6	257.9	275.4	6.0	6.0	1,427.7	18.1	40.5	3,076.1	18.8	64.2	−27.8	M
Textron	1,132.8	1,047.7	1,347.9	300.2	146.2	8.2	7.8	1,585.0	18.9	85.0	4,337.4	31.1	41.0	291.5	12.3
TRW Inc.	1,106.1	1,018.2	1,698.3	680.1	392.7	8.5/10.0	8.5	985.9	39.8	172.3	3,735.4	45.5	72.6	403.0	15.3
U.S. Steel	7,457.0	7,177.0	9,386.0	2,209.0	789.0	9.0	9.0	5,405.0	40.9	173.7	18,446.0	50.9	92.0	1,347.0	6.4
Union Carbide	1,765.0	1,644.0	2,720.0	1,076.0	892.0	9.3	9.0	4,019.0	26.8	67.7	10,581.0	25.7	104.0X	591.0	15.0
United Technologies	2,895.4	2,679.0	3,892.1	1,213.1	1,139.0	8.3	7.8	3,845.5	31.5	101.2	10,528.1	37.0	212.2	1,178.5	15.3
Unocal	662.0	601.0	999.0	398.0	188.0	7.0	7.0	1,630.0	24.4	61.3	10,797.0	9.3	49.0	822.0	5.6
Westinghouse	3,528.2	3,183.9	3,579.2	395.3	376.2	8.3/12.3	8.3/12.3	3,234.7	12.2	110.7	9,681.6	37.0	117.0	742.1	13.6
Weyerhaeuser	467.7	452.2	570.2	118.0	99.8	10.5	9.5	2,794.5	4.2	20.4	6,005.3	9.5	32.4	271.6	10.7
Xerox Corp.	1,283.6	1,277.9	1,372.4	94.5	91.1	8.5	8.0	4,386.2	2.2	31.3	9,816.7	14.0	136.4	652.9	17.3

Operating income:
Income derived from actual operations of the company.

Pension expense:
The amount charged against income to fund benefit payments in a given year.

Corporate assets:
The value of all corporate assets, as shown on the balance sheet.

Vested funding status as a percentage of net worth:
A comparison of the vested funding status, either positive or negative, to a company's net worth.

Notes:
A — Includes assets the company owes but has not contributed to the plan.
B — Procter & Gamble has a profit-sharing plan and no defined benefit plan.
G — Company elected early adoption of FASB 87 and/or FASB 88.
M — Pension statistics as percentages of either a negative net income or negative operating profit are meaningless.
X — Includes Canadian or overseas plans.
* — Agway and Farmland Industries have been withdrawn from this list. Firestone Tire & Rubber and Dana Corp. were substituted.

Source: Wright Investors' Service, Bridgeport, Conn.

THIS YEAR'S CASH MANAGEMENT DIRECTORY profiles 260 organizations in seven categories. The profiles feature:

- 141 U.S. and Canadian banks (pages CM8 and CM27);
- 38 national and regional associations in the United States and Canada (pages CM20 and CM27);
- 18 service providers (page CM20);
- 17 treasury workstation vendors (page CM26);
- 27 short-term investment managers (page CM22);
- 11 data base suppliers (page CM24); and
- 8 microcomputer software firms (page CM25).

Among the highlights in the directory's profiles are:

- Of the short-term investment managers that run corporate working cash, 13 offer hedge, arbitrage and other strategies involving options or futures or both.

Seven short-term managers invest in common stocks, an unusual investment for corporate cash.

- In terms of number of corporate cash clients, Capitoline Investment Services Inc. is the largest with 91. It runs $545 million.
- In terms of value, Chemical Bank is the largest with $2 billion. It has 17 clients.

Stories in this section

Commercial paper use increases	CM28
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Interest rates will fall	CM30
Firms slow to pay electronically	CM30
People	CM31
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FASB backs cash flow statement	CM34
MDU has three-tier program	CM36

GM setting up network in lieu of using ACH

By Sheryl L. Cohen

NEW YORK — General Motors Corp. soon will begin paying its suppliers electronically by setting up its own payment network outside the automated clearinghouse system.

GM's plan would be the most extensive use by any company of electronic funds transfer for corporate trade payments, and it highlights shortcomings in the ACH.

GM plans to develop an electronic network, not just to transfer payments electronically as the ACH can do, but also to transmit a broad array of information to enhance a trade relationship.

The system would more closely integrate cash management with manufacturing, such as using an electronic inventory system that delivers parts for assembly just as they are needed, according to Ned Hill, associate professor of finance, Indiana University, Bloomington.

GM is working with its major banks to set up its own payment system to overcome shortcomings of the ACH, according to a number of sources.

At GM, Benson Woo, director of worldwide banking and U.S. cash manager, and Ted Hart, manager of banking, would only confirm they are working on an electronic payment system.

Mr. Woo said plans would be released in about three months.

"The GM preference is not to go through the ACH" because of a lack of control of payments, liability and the limited capability of the ACH to transmit a variety of information that would enhance trade relationships, a source said.

The GM situation illustrates a major problem of the ACH: getting corporations to use it for corporate trade payments.

The ACH, a 13-year-old nationwide system designed to replace paper checks with electronic funds transfer, now handles few corporate trade payments.

"The ACH is only a very small segment" of corporate payments, Mr. Hill said.

Last year, just 12,344 corporate trade payments were originated through the ACH system, according to the National Automated Clearing House Association, Washington. By contrast, the ACH handled the same year a total of 766 million electronic transactions, including 480 million private payments, many of which involved direct deposit of payroll or Social Security checks.

In 1984, the first year of electronic corporate trade payments, 2,689 CTP transactions were originated, compared with 599 million transactions (including 341 million private ones), for the entire ACH.

(The National Corporate Cash Management Association has a proposal to develop an alternative payment system. In its proposal, the NCCMA calls the current electronic system inadequate for large corporations, whose activities account for the major portion of money transfers in the payment system.

("A lot of the industry doesn't view the ACH as a viable payment system," said one banker who asked to remain unnamed. ("If the current environment is not altered, corporations will seek other alternatives" to the ACH.)

According to several sources, GM would set up a network of six or nine banks, with The First National Bank of Chicago as one of the main banks. First Chicago officials declined to comment.

To receive their payments, suppliers would have to have a depository account at one of the banks in the GM network, sources said. By sending directly to these banks, GM would avoid the ACH, which customarily transfers electronic payments from the originator's bank to the receiver's bank.

But GM's network of banks isn't interested in becoming involved simply to serve as a substitute ACH conduit of payments.

"Moving dollars is the least important activity in a trading relationship," a source said.

According to sources, the banks are interested in developing — for GM and other clients — the type of electronic information transfer system wanted by GM but not provided by the ACH. A GM system "will be a large blueprint for setting up a new payment system," a bank executive said.

With an electronic information capability, suppliers could monitor a buyer's inventory to service a client better.

As it was set up, "the ACH looked at facilitating the flow of funds between banks and not the cash management between corporations," a source remarked.

Savings with an electronic network results from shortening the length of time used in the entire communication process, such as electronically linking GM's suppliers with customers, Indiana University's Mr. Hill said.

By converting paper transmission to electronic communication, time and money are saved, he said. Companies, in general, could save between $25 and $100 per transaction by converting entirely from a paper-based system, he added.

GM could save between $200 and $300 per car by using such a system with suppliers, he said.

In addition, inventory costs could be reduced. "If you order electronically you don't have to keep as much inventory," he said.

Said another source: "It's their way of reducing their cost by what they call 'electronic data interchange' — what goes on between a company and its suppliers."

All information exchange has been by paper, creating a huge expense. "It's probably five or six iterations back and forth," he added. "All of that has taken place by paper and it's bloody expensive."

According to Mr. Hill, several companies are beginning to identify possible savings from an electronic payment and information system. But officials of many firms, not yet convinced of the worth, could be persuaded by implementation by large companies such as GM, he added.

Continued on page CM28

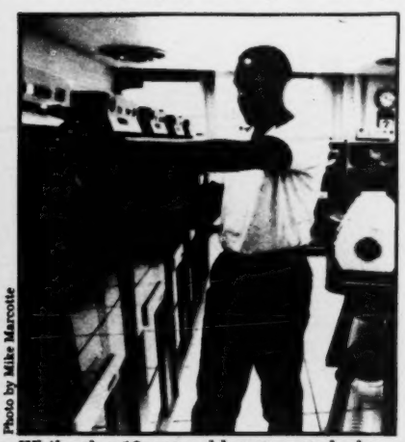
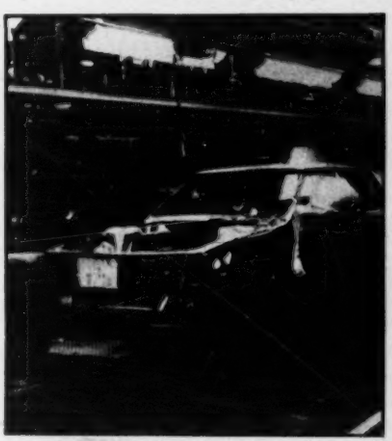


Photo by Mike Marcotte

While the 13-year-old automated clearinghouse system specializes in the electronic transfer of private payments . . .



. . .GM is devising a system that will transmit a broader array of information to enhance a trade relationship.

Guide to abbreviations for bank services charts*

Terminal-initiated W/Ts: On-line wire transfers.

Terminal-initiated com. ppr.: On-line printing and storage of commercial paper certificates.

Terminal-initiated stop pmts.: On-line stop payments on checks.

Electronic DTCs: Depository transfer checks.

Terminal-based ACH: On-line automated clearinghouse transactions.

Letters of credit: Commercial trade letters of credit.

Collections: Bank-messengered pickups of receipts.

Sweep: Deposits in non-interest earning account are swept into investment account.

* Charts begin on page CM2

Compensating balances being replaced

As corporations switch to cash payments, banks look to surcharges

By Barry B. Burr

Many corporations are only now switching to paying cash for their bank cash management service charges instead of non-interest-earning compensating balances, adding to the movement that has been swelling since the 1970s.

In response, some banks have been trying, apparently often without success, to impose surcharges on cash payments by corporate clients to discourage the withdrawal of compensating balances, which are easy sources of income.

At the same time, banks apparently haven't encouraged corporations to revert to balances by offering earnings credit rates more competitive with money market investment returns.

Despite the move to fees, most companies aren't abandoning their compensating balances entirely, mainly because of the impracticality of doing so. Executives noted, for instance, that the paperwork and monitoring required to transfer small balances to interest-bearing investments might cost more than the potential returns. So they leave those balances in non-interest accounts, and the banks apply the credit to cash management charges.

Nevertheless, the executives interviewed emphasized their main goal is to minimize their balances.

Traditionally, corporations had paid for cash management services through non-interest earning compensating balances. While the custom has changed in recent years, many companies still pay for some or all of their bank fees by balances. Corporations receive no interest for the balances, but banks impute an interest charge, known as the earnings credit rate, on the balances to compensate for charges. Banks would profit from the spread between the earnings credit balance, which is below market rates, and the rate at which they actually invested the money.

One of the latest to switch from compensating balances is Hilton Hotels Corp., Beverly Hills, Calif. "In the past we used compensating balances," said Richard H. Chambers, assistant treasurer. "But we're now beginning to pay with hard dollars."

Hilton has been moving to the new payment method in the past six months, since Mr. Chambers took over the position.

It plans to pull out about $6 million in balances. Mr. Chambers estimates the annual investment opportunity cost at about $500,000.

Consolidated Edison Co. of New York has moved a majority of its

Continued on page CM36

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h - Both multi-tiered and regular zero balance accounts
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x - Terminal-based letters of credit

BANK SERVICES

Glossary of abbreviations - p. CM1

	Lockbox — retail	Lockbox — wholesale	Lockbox — other	Lockbox — controlled disbursement	Disbursement — delayed funding	Disbursement — other	Presentment points	Disbursement reporting	Terminal-linked/delayed rep. ppts.	Terminal-linked/delayed coll. ppts.	Terminal-linked/delayed rep. ppts.	Other communications	Electronic DTCs	Terminal-based ACH	Electronic deposit	Pre-authorized debits	Direct debit	Terminal-based payments	Pre-authorized trade payments	Corporate trade credit	Letters of credit	Collections	Foreign exchange settlement	Federal funds trading	Medium-term/demonstrated credits	Lockbox/disbursement consulting	Other consulting	Stand-alone consulting	Sweep	Separate management	Zero balance accounts	Payable-thru drafts	Account reconciliation	Treasury workstation	Other
ALABAMA																																		
AmSouth Bank	✓	a			✓				✓				c		✓	c	✓	✓			✓		✓			c			✓			h	✓	c		
ARIZONA																																		
First Interstate Bank	✓	a	c						✓	✓		✓	c		✓	✓	✓	✓	✓		✓	e	✓	✓		c	c					✓	✓	c	c	c
CALIFORNIA																																		
Bank of America		a	c		b				✓	✓	✓	✓	c		✓	✓	✓	✓	✓		x	g	✓	✓		c	c	✓				h	✓	✓	c		
First Interstate Bank	✓	a	c		b		3		✓	✓			c		✓		✓	✓	✓		x	e	✓	✓		c						✓	✓	c		
Security Pacific National Bank	✓	a	c		b		6		✓	✓		✓			✓	✓	✓	✓	✓		x	g	✓	✓		✓	c		✓			h	✓	c	c	c
Union Bank	✓	a			b		1		✓	✓					✓		✓	✓	✓		x	e	✓	✓	✓	c						✓	✓	c	c	
Wells Fargo Bank		✓	c		✓	✓	2		✓	✓					✓	✓	✓	✓	✓		x	e	✓	✓								h		c	c	
COLORADO																																		
Central Bank of Denver	✓	a			b		5		✓				c		✓		✓	✓	✓		✓	e							✓			h	✓	c		
Colorado National Banks	✓	✓			b		2		✓	✓			c		✓	✓	✓	✓			✓	e	✓			c	c					h	✓	c		
First Interstate Bank	✓	a	c		b		6		✓	✓			c		✓		✓	✓			x	e	✓	✓		c						✓	✓	c	c	c
United Bank of Denver	✓	a	c		b	✓	4		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓								✓	✓	c	c	
CONNECTICUT																																		
Connecticut Bank & Trust Co.	✓	a	c		b				✓	✓		✓	c		✓		✓	✓	✓		✓	e	✓	✓		c			✓	c		h	✓	c		c
Connecticut National Bank	✓	✓	c		b	✓			✓	✓		✓	c		✓	✓	✓	✓	✓		✓	e	✓	✓		c			✓			✓	✓	c	c	c
DELAWARE																																		
Bank of Delaware	✓	✓			b				✓	✓			c		✓		✓	✓	✓		✓	e	✓	✓		c			✓			h	✓	c		
Delaware Trust Co.		✓													✓		✓	✓			✓								✓			h		c		
Wilmington Trust Co.	✓	a			b				✓	✓		✓			✓		✓	✓			✓								✓	✓		✓	✓	c		
DISTRICT OF COLUMBIA																																		
American Security Bank	✓	a			b				✓	✓			c		✓	✓	✓	✓			✓	e	✓	✓				✓		✓	c	h	✓	c	c	
Riggs National Bank	✓	✓	i		b				✓	✓			c		✓		✓	✓	✓		✓	e	✓		✓					✓		✓	✓	c		
FLORIDA																																		
Barnett Bank	✓	a	c		b	✓	3		✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓	✓	c						h	✓	c	c	
First Florida Bank	✓	a			b	✓	3		✓	✓			c		✓	✓	✓	✓			✓	e	✓	✓					✓	✓		✓	✓	c	c	c
First Union National Bank	✓	✓	c		b		2		✓				c		✓	✓	✓	✓	✓		✓	e	✓	✓		c						✓	✓	c	c	c
Florida National Bank	✓	✓			b				✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓					✓	✓		✓	✓	c	c	
Southeast Bank	✓	a	c		b	✓	✓		✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓						✓	✓		✓	✓	c	c	
Sun Banks Inc.	✓	✓	c		b		✓		✓	✓			c		✓	✓	✓	✓	d		✓	e	✓			c			✓	✓		h	✓	c	c	
GEORGIA																																		
Citizens & Southern National Bank	✓	a	c		b	✓	2		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e				c		✓		✓		h	✓	c	c	c
Trust Co. Bank		✓			b	✓	2		✓	✓		✓	c		✓	✓	✓	✓	✓		✓	g	✓	✓		c			✓	✓		✓	✓	c	c	
HAWAII																																		
Bank of Hawaii	✓	✓	c						✓	✓			c				✓	✓	✓		✓	e	✓									h	✓	c		
IDAHO																																		
Idaho First National Bank		✓			✓				✓				c				✓	✓			✓	e	✓	✓			✓		✓			✓	✓	c		c
ILLINOIS																																		
ABN/LaSalle	✓	a			b	✓			✓	✓			c		✓	✓	✓	✓	✓		✓	g	✓	✓	✓		c	c		✓		✓	✓	c	c	c
Continental Illinois Bank	✓	✓	i		b				✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓	✓	c	c	✓		✓		✓	✓	c		c
First Chicago		a	c		b	✓	4		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓		c				✓		h	✓	c	c	c

BANK SERVICES

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b - Reports by 10:30 EST
c - See profile for additional information
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f - Overseas lockbox collections. See profile for locations
g - Both documentary collections and overseas lockboxes
h - Both multi-tiered and regular zero balance accounts
i - Mail intercept facility
x - Terminal-based letters of credit

	Lockboxing — retail	Lockboxing — wholesale	Lockboxing — other	Lockboxing — consolidated	Disbursement — delayed funding	Disbursement — payable reports	Transmission balance reporting	Terminal-initiated wire transfers	Terminal-initiated coin. ppr.	Terminal-initiated stop pmts.	Other communications	Electronic DTCs	Electronic-based ACH	Terminal deposit	Direct deposit	Pre-authorized trade payments	Corporate letters of credit	Letters of credit	Collections	Foreign exchange trading	Foreign exchange advisory	Multi-lateral netting	Lockbox/disbursement studies	Other consulting	Stand-alone consulting	Other	Sweep	Separate management accounts	Zero balance accounts	Payable-thru drafts	Account reconciliation	Treasury workstation	Other
Northern Trust Bank		a	i		b	✓			✓	✓			✓			✓	✓	✓	✓	✓	x	g	✓				c					h	✓	c			c
INDIANA																																			
Indiana National Bank	✓	✓			b				✓				c		✓	✓	✓	✓	✓								c				✓			h	✓	✓			
Merchants National Bank & Trust Co.	✓	✓			b				✓	✓			c		✓		✓	✓	✓		✓	e											✓	✓	c	c		
IOWA																																			
Norwest Bank Des Moines	✓	a			b		✓		✓				c		✓	✓	✓	✓	✓		✓	e	✓	✓									h	✓	✓			
KANSAS																																			
Bank IV Wichita	✓	✓			b	✓			✓	✓			c		✓	✓	✓	✓			x	e	✓										h	✓	c			
KENTUCKY																																			
First National Bank of Louisville	✓	✓	c		b	✓	2		✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓	✓		c			✓	✓		✓	✓	c	c		
Liberty National Bank	✓	✓			b	✓			✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓				c			✓			✓	✓	c	c		
LOUISIANA																																			
City National Bank of Baton Rouge	✓	✓			b	✓	2		✓				c		✓		✓	✓	✓								✓			✓			✓	✓	c			
MARYLAND																																			
Equitable Bank	✓	✓			b	✓	2		✓	✓			c		✓	✓	✓	✓			✓	e	✓				c			✓	c		h	✓	c			
First National Bank of Maryland	✓	a	i/c		b		2		✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓				c			✓			✓	✓	c	c		c
Sovran Bank	✓	a	i						✓				c		✓	✓	✓	✓	✓		✓	e	✓	✓			c		✓	✓	✓		h	✓	c			
MASSACHUSETTS																																			
Bank of Boston		✓	c		b	✓			✓	✓			c		✓	✓	✓	✓	✓		x	g	✓	✓	✓		c						✓	✓	c			
Bank of New England	✓	a	c		b				✓	✓			c		✓		✓	✓			✓	e	✓	✓			c			✓			✓	✓	c	c		
Shawmut Bank	✓	a	i		b		3		✓				c		✓	✓	✓	✓	✓		✓	e	✓	✓			c						✓	✓	c	c		c
State Street Bank & Trust Co.		✓			b	✓			✓	✓			c		✓	✓	✓	✓	✓		x	e	✓	✓	✓		c			✓			h	✓	c			
MICHIGAN																																			
Comerica Bank-Detroit	✓	✓	c		✓				✓	✓			c		✓		✓	✓			✓	e					c						✓	✓	c	c		
First of America Bank-Detroit	✓	a			b										✓		✓	✓	✓		✓	e	✓	✓						✓			✓	✓	c			
Manufacturers National	✓	✓			b	✓	2		✓	✓			c		✓	✓	✓	✓	✓		x	g	✓	✓			c			✓			h	✓	c			c
Michigan National Corp.	✓	a			b				✓	✓			c		✓	✓	✓	✓			✓	e	✓				c					✓	✓	✓	c	c		
National Bank of Detroit	✓	a	i		b		3		✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓			c						✓	✓	c	c		
Old Kent Bank & Trust Co.	✓	✓			b	✓			✓						✓	✓	✓	✓			✓	e	✓	✓	✓								✓	✓	c			c
MINNESOTA																																			
First Bank Minneapolis	✓	✓			b				✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓				c						h	✓	✓	c		
First Bank St. Paul	✓	✓			b				✓	✓			c		✓	✓	✓	✓	✓		x	e	✓				c						h	✓		c		
Marquette Bank Minneapolis		✓			✓		2		✓	✓		✓	c		✓		✓	✓			✓									✓			✓	✓	c			
Norwest Bank Minneapolis	✓	✓	✓		b	✓	15		✓	✓					✓	✓	✓	✓	d		x	g	✓	✓			c						✓	✓	c			
Norwest Bank St. Paul	✓	✓	c		b	✓	15		✓						✓	✓	✓	✓	d		✓	g	✓	✓			c						✓	✓	c			
MISSISSIPPI																																			
Deposit Guaranty National Bank		✓			b	✓	2		✓				c			✓	✓	✓			✓	e	✓				c						✓	✓	c			
MISSOURI																																			
Boatmen's National Bank of St. Louis	✓	a	c		b		2		✓	✓		✓	c		✓	✓	✓	✓			✓	e	✓	✓			✓						h	✓	c	c		c
Centerre Bank	✓	a	c		b	✓	3		✓	✓					✓	✓	✓	✓	✓		x	e					c			✓			h	✓	✓	c		
Commerce Bank of Kansas City	✓	✓			b		✓		✓	✓			c		✓	✓	✓	d			✓	e	✓				c						✓	✓	c			
Mercantile Bank	✓	a			c		11		✓	✓			c		✓	✓	✓	✓	✓		x	e	✓				c	c		✓			h	✓	c	c		
United Missouri Bank	✓	✓	c		b		3		✓	✓		✓	c		✓		✓	✓	✓		x	e	✓	✓			c	✓			✓	c		✓	✓	c	c		c

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BANK SERVICES

	Lockbox/ltr — retail	Lockbox/ltr — wholesale	Lockbox/ltr — other	Lockbox/ltr — controlled disbursement	Lockbox/ltr — delayed funding	Disbursement policies	Prereconciliation balance reporting	Terminal-based W/Ts	Terminal-initiated loan pmts.	Terminal-initiated stop pmts.	Terminal-initiated com. ppr.	Other communications	Electronic DTCs	Electronic ACH	Terminal-based deposit	Direct deposit debits	Pre-authorized trade payments	Corporate trade payments	Letters of credit	Collections	Foreign exchange trading	Foreign exchange advisory	Multi-lateral netting	Investment studies	Lockbox/disbursement consulting	Other consulting	Stand-alone consulting	Sweep	Separate management accounts	Zero balance accounts	Payable-thru drafts	Account reconciliation	Treasury workstation	Other	
MONTANA																																		
Norwest Bank Billings		✓			✓		✓		✓						✓	✓	✓	✓	d		✓	e	✓	✓			c						✓	✓	c			
NEBRASKA																																		
First National Bank of Omaha	✓	a			b		7		✓	✓		✓	c		✓		✓	✓	✓		✓	e	✓	✓			c				✓			✓	✓	c			
Norwest Bank Omaha	✓	✓			✓	✓	6		✓						✓	✓	✓	✓	✓		✓	e	✓	✓			✓						✓	✓	c			
NEW JERSEY																																		
First Fidelity Bank	✓	a			b				c	✓		✓	c		✓	✓	✓	✓	✓		✓	e	✓	✓						✓			✓	✓	c			c
First Jersey National Bank		✓			✓												✓				✓									✓			h		c			
Midlantic Banks Inc.		a	c		b	✓	2		✓	✓			c		✓		✓	✓	✓		✓						c			✓	c		✓	✓	✓	c		c
United Jersey Bank		✓	c		b		1		✓	✓		✓	c		✓		✓	✓	✓		✓		✓				c						h	✓	c			
NEW MEXICO																																		
First National Bank Albuquerque	✓	a			b		2		✓	c			c		✓	✓	✓	✓	✓		✓	e								c			✓	✓	✓			
NEW YORK																																		
Bank of New York	✓	a	i/c		b	✓	3		✓	✓		✓			✓	✓	✓	✓	✓		✓	e	✓	✓			c			✓	c		h	✓	c	c		c
Chase Lincoln First Bank	✓	✓			b	✓			✓	✓			c		✓		✓	✓	✓		✓	e	✓	✓			c	c					✓	✓	c			c
Chase Manhattan Bank		✓			b				✓	✓	✓		c		✓	✓	✓	✓	✓		x	e	✓	✓	✓		c	c	✓				h	✓	c	c		
Chemical Bank	c	a	i/c		b	✓	1		✓	✓	✓	✓			✓	✓	✓	✓	✓		x	e	✓	✓							c		h	✓	c	c		
Citibank	✓	a			b		2		✓	✓	✓	✓	c		✓	✓	✓	✓	c		✓	e	✓	✓	✓		c	c		✓			h	✓	c	c		c
European American Bank	✓	✓							✓	✓					✓		✓	✓			✓	e	✓	✓									h	✓	c	c		c
Irving Trust		✓	c		b	✓			✓	✓	✓	✓			✓	✓	✓	✓	✓		x	e	✓	✓			c	c	✓		✓		✓	✓	c			
Key Bank	✓	a	i		b		12		✓						✓		✓	✓			✓	e	✓	✓							c		h	✓	c			
Manufacturers Hanover	✓	a	c		b	✓			✓	✓	✓	✓	c		✓	✓	✓	✓	✓		x	g	✓	✓	✓		c	c	✓		✓		h	✓	✓	c		
Manufacturers & Traders Trust Co.	✓	✓			✓				✓	✓			c				✓	✓	d		✓	e	✓										✓	✓	c			
Morgan Guaranty Trust					b		1		✓	✓	✓	✓					✓	✓	✓		✓	e	✓	✓	✓		✓	c					h	✓	c			
National Westminster Bank	c	c	i/c		b				✓	✓			c		✓		✓	✓	✓		x	g	✓				c				c		h	✓	c	c		
NORTH CAROLINA																																		
Branch Banking & Trust	✓	a			✓	✓			✓				c		✓	✓	✓	✓	✓		✓	e	✓	✓						✓	✓			✓	c	c		
First Union National Bank		✓			b	✓			✓	✓		✓	c		✓	✓	✓	✓	✓								c		✓		✓		✓		c	c		
First Wachovia Corp.	✓	✓	c		b	✓	4		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓			c	c	✓		✓		h	✓	c			c
NCNB National Bank	✓	✓	c		b	✓	2		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓				c	c	✓		✓	c		✓	✓	c	c		c
OHIO																																		
AmeriTrust Co.	✓	✓	c		b	✓	1		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓				c				c		h	✓	c	c		
BancOhio National Bank	✓	a			b				✓			✓	c		✓	✓	✓	✓	d		✓	e					c			✓			✓	✓	c	c		c
Bank One Dayton	✓	a			b		3		✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓			c			✓	c		✓	✓	c	c		
Central Trust Co.	✓	✓			b				✓				c		✓	✓	✓	✓			x	e	✓				c			✓			h	✓	c	c		
Fifth Third Bank	✓	✓	c		b	✓			✓			✓	c		✓	✓	✓	✓	✓		✓	f	✓				c						✓	✓	c	c		
First Nat'l. Bank of Cincinnati	✓	✓			b	✓			✓				c		✓		✓	✓			x	e	✓				c			✓			h	✓	c			
Huntington National Bank	✓	✓			b	✓	4		✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓			c			✓	c		✓	✓	c	c		c
National City Bank		a	c		b	✓			✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓			c						✓	✓	c	c		c
Society National Bank	✓	a			b				✓	✓			c		✓		✓				✓	e	✓				c			✓			✓	✓	c			
Toledo Trust Co.	✓	✓			b				✓						✓		✓	✓	✓		✓	e	✓	✓						✓			✓	✓	✓			
OKLAHOMA																																		
Bank of Oklahoma	✓	a			b		2		✓	✓			c		✓	✓	✓	✓			✓	e					c	c		✓			h	✓	c			
BNB & Trust Co. -Tulsa	✓	a			b		2		✓				c		✓	✓	✓	✓	✓		✓	e	✓	✓			c				✓		h	✓	c	c		

a - Automated and manual wholesale lockboxing
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c - See profile for additional information
d - Ability to receive corporate trade payments only
e - Documentary collections
f - Overseas lockbox collections. See profile for locations

g - Both documentary collections and overseas lockboxes
h - Both multi-tiered and regular zero balance accounts
i - Mail intercept facility
x - Terminal-based letters of credit

BANK SERVICES

	Lockbox — retail	Lockbox — wholesale	Lockbox — other	Disbursement — controlled disbursing	Disbursement — other	Presorted payable	Terminal-based balance reporting	Terminal-based lockbox rpt.	Terminal-based lockbox dep. rpts.	Terminal-based cash mgt.	Other corporate cash mgt.	Electronic DTC's	Electronic-based ACH	Direct deposit	Electronic payments	Pre-authorized debits	Corporate trade payments	Letters of credit	Collections	Foreign exchange	Foreign exchange advisory	Multi-lateral netting	Lockbox/disbursement combo	Other consulting	Stand-alone consulting	Other	Sweep	Separate balance accounts	Zero balance accounts	Payable-thru drafts	Account reconciliation	Treasury workstation	Other
First Nat'l. Bank of Oklahoma City	✓	✓			b		6		✓			c		✓	✓	✓	✓	✓		✓	e		✓			c				✓		✓		✓	c		c
Liberty National Bank	✓	a			b		2		✓			c		✓	✓	✓	✓			✓	e	✓	✓					✓				h	✓	c	c		
OREGON																																				
First Interstate Bank	✓	a	c		c/b	✓	6		✓	✓			c		✓	✓	✓	✓	✓		✓					c	c	✓		✓		h	✓	c	c		
U.S. National Bank	✓	✓	c		b	✓			✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓			c				✓	c		✓	✓	c		
PENNSYLVANIA																																				
Continental Bank		✓			✓				✓				c		✓		✓	✓		✓	e		✓			c				✓	c	h		c		c
First Pennsylvania Bank	✓	a			b	✓			✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓			c				✓	c	✓	✓	c		
Mellon Bank	✓	a	c		b	✓	2		✓	✓	✓	✓	c		✓	✓	✓	✓	✓		✓	g	✓	✓	✓	c	c	c		✓	c	c	✓	c	c	
Meridian Bank	✓	✓	c		b				✓	✓			c		✓	✓	✓	✓			✓	e	✓	✓		c				✓	✓	✓	✓	c		c
Philadelphia National Bank	✓	✓	c		b		2		✓	✓		✓	c		✓	✓	✓	✓	✓		x	g	✓	✓		c	c	✓		✓	✓	h	✓	✓	c		c
Pittsburgh National Bank	✓	a	c		b	✓	2		✓	✓		✓	c		✓	✓	✓	✓	✓		✓	e	✓	✓		c	c	✓		✓	c	h	✓	c	c		
Provident National Bank	✓	a	c		b				✓	✓			c		✓		✓	✓			✓	e	✓	✓		c		✓		✓	✓	h	✓	c	c		
RHODE ISLAND																																				
Fleet National Bank		✓			b		1		✓	✓			c		✓	✓	✓	✓	✓							c				✓		h		✓			
SOUTH DAKOTA																																				
Norwest Bank South Dakota	✓	✓	✓		b	✓	15		✓						✓		✓	✓	d		✓	g	✓	✓								✓	✓	c			c
TENNESSEE																																				
Commerce Union Bank	✓	✓	i		b	✓	9		✓	✓		✓	✓		✓		✓	✓	✓		x	e	✓	✓			c		✓		✓	✓	h	✓	c			c
First American National Bank	✓	✓	i/c		b		2		✓				c		✓		✓	✓	✓		✓	g	✓	✓							✓		h	✓	c			c
First Tennessee Bank	✓	a			b		9		✓				c		✓		✓	✓	d		✓	e	✓	✓		c	c						h	✓	c	c		c
Third National Bank	✓	a			b	✓	3		✓	✓			c		✓	✓	✓	✓	✓		x	e	✓	✓		c	c			✓			h	✓	c	c		c
TEXAS																																				
Cullen Bank		✓			✓				✓				c		✓		✓	✓	✓		✓	e	✓										✓	✓	c			
First City Bank - Dallas	✓	a	c		c/b	✓	4		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓		c	c						h	✓	c	c		
First City Nat'l. Bank of Houston	✓	a	c		c/b	✓	4		✓	✓		✓	c		✓	✓	✓	✓	✓		x	g	✓	✓		c	c				✓		h	✓	c	c		
Frost National Bank	✓	✓			b				✓	✓			c		✓	✓	✓	✓	✓		✓												✓	✓	c			
Interfirst Bank Dallas	✓	✓	c		✓	✓	5		✓	✓		✓	c		✓	✓	✓	✓	✓		✓	e	✓	✓		c	c	✓					h	✓	✓			
MBank Houston	✓	✓			b		6		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓	✓	c							h	✓	c	c		c
NBC Bank - San Antonio	✓	✓							✓				c		✓	✓	✓	✓	✓		✓	e	✓	✓									h	✓	c	c		c
RepublicBank - Dallas/Houston	✓	✓	c		b		5		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓	✓									✓	✓	c	c		
Texas American Bancshares	✓	✓	c		b		4		✓				c		✓		✓	✓	✓		x	e	✓	✓		c							✓	✓	c	c		c
Texas Commerce Bank	✓	a	c		b	✓	11		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓								c		✓	✓	c	c		c
UTAH																																				
First Interstate Bank of Utah	✓	a	c		b	✓	4		✓	✓			c		✓	✓	✓	✓	✓		✓	e							✓		c		h	✓	c	c		
VIRGINIA																																				
Bank of Virginia	✓	✓	c		✓				✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓			c				✓			h	✓	c	c		c
Sovran Bank	✓	a	c		b	✓			✓	✓		✓	c		✓	✓	✓	✓	✓		✓	e	✓	✓		c				✓	✓		h	✓	c	c		
United Virginia Bank	✓	a			b	✓			✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓			c					✓		✓	✓	c	c		
WASHINGTON																																				
First Interstate Bank	✓	a	c		b	✓	2		✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓			c		✓		✓	✓		h	✓	c	c		
Rainier National Bank	✓	a	c		b		2		✓	✓		✓	c		✓	✓	✓	✓	✓		x	g	✓	✓		c							h	✓	c	c		
Seattle First National Bank		a			b	✓			✓	✓			c		✓	✓	✓	✓	✓		x	e	✓	✓		✓		✓					✓	✓	c	c		

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BANK SERVICES

	Lockbox — retail	Lockbox — wholesale	Lockbox — other	Disbursement — controlled	Disbursement — delayed funding	Presentment points	Disbursement reportube	Terminal balance reportube	Terminal-initiated W/Ts	Terminal-initiated com. ppr.	Terminal communications	Terminal-initiated sup pmts.	Other DTCs	Other ACH	Electronic deposit	Terminal-based deposits	Direct deposit	Pre-authorized debits	Corporate trade payments	Letters of credit	Collections	Foreign exchange	Foreign exchange advisory	Multi-lateral netting	Lockbox/disbursement studies	Stand-alone consulting	Other consulting	Sweep	Separate management account	Zero balance accounts	Payable-thru drafts	Account reconciliation	Treasury workstation	Other
WISCONSIN																																			
M&I Marshall & Ilsley Bank	✓	✓			b	✓			✓	✓		✓	c		✓	✓	✓	✓	✓		x	e	✓			c			✓			h	✓	c			
Marine Bank	✓	✓			b		6		✓	✓			c		✓		✓	✓	✓							c						✓	✓	c			
CANADA																																			
Bank of Novia Scotia	✓	a	i						✓	✓			c		✓	✓	✓	✓	✓		✓	e	✓	✓		c	c	✓		✓		h	✓	✓			c
Canadian Imperial Bank	✓	a	i/c						✓	✓			c		✓	✓	✓	✓	✓		✓	g	✓	✓	✓	c		✓		✓		h	✓	c	✓		c
Citibank Canada		✓			b/c				✓	✓	c	c			c	✓	✓	✓			x	g	✓	✓	✓	✓			✓	✓		h		✓			
Royal Bank of Canada	✓	a	i/c						✓	✓	✓						✓	✓	✓		x	e	✓	✓					✓			h	✓	c			
Toronto-Dominion Bank	✓	a	i/c		c				✓	✓		✓	c				✓	✓	✓		x	g	✓	✓		c	c		✓	✓		h	✓	c			c

U.S. banks

a

American Security Bank

1501 Pennsylvania Ave. N.W., Washington, D.C. 20013; (202) 624-4000

Fortune 1000 lockbox clients: 8
Fortune 1000 total clients: 8
Financial services clients: 50
Executive: Richard Clarke, vice president.
Contact: Felix Samter, vice president.
C.M. professionals: 8
American Security Bank is a member of the BankLink balance reporting network.
Its account reconciliation package was developed by Disc Inc. The treasury workstation is by Capital Systems.

AmeriTrust Co.

900 Euclid Ave., Cleveland, Ohio 44101; (216) 687-4219

Fortune 1000 lockbox clients: 120
Fortune 1000 disbursement clients: 65
Fortune 1000 total clients: 185
Financial services clients: 25
Executive: Donald G. Broomfield, vice president.
Contact: Mr. Broomfield.
C.M. professionals: 13
Representative clients: Firestone, IM, Parker Hannifan, Sohio.
AmeriTrust Co.'s Cash Management services operates a stand-alone lockbox processing facility in Cincinnati.
The bank uses Chase Access Services for its balance reporting and treasury workstation.
Consulting services include lockbox/disbursement studies, using the Duke model.
AmeriTrust had $100 million in taxable assets under management as of April 30.
Disc Inc. developed the account reconciliation package.

AmSouth Bank

P.O. Box 11007, Birmingham, Ala. 35288; (205) 326-5120

Fortune 1000 lockbox clients: 29
Fortune 1000 disbursement clients: 35
Fortune 1000 total clients: 39
Executive: David A. Simmons, vice president-department manager.
Contact: Michael Sullivan, cash management marketing representative.
C.M. professionals: 3
AmSouth Bank's Cash Management Marketing Department uses the National Data Corp. system for balance reporting.
The bank offers terminal-initiated ACH transactions in cash concentrated deposits only.
The consulting group uses the Phoenix-Hecht 4.0 and Lockbox Micro Model studies for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc.

b

BancOhio National Bank

155 E. Broad St., Columbus, Ohio 43251; (614) 463-8484

Executive: John J. Brennan, vice president and manager-corporate services.
Contact: Richard L. Heston, vice president and sales manager.
C.M. professionals: 21
BancOhio's Corporate Services uses the ADP balance reporting network.
The bank's lockbox/disbursement studies use the UAI/Duke model.
Its account reconciliation package was developed by Disc Inc. and its treasury workstation is MicroCTS by Capital Systems.
Other services include deposit reconcilement, cash concentration, payroll, intraday balance reporting, ARP truncation/inquiry, preauthorized collection, cash application and cash services.

Bank of America

P.O. Box 37000, San Francisco, Calif. 94137; (415) 953-0484

Fortune 1000 lockbox clients: 900
Fortune 1000 disbursement clients: 100
Fortune 1000 total clients: 900
Financial services clients: 100
Executive: Richard Griffith, executive vice president.
Contact: Marshall Soura, vice president, New York, (212) 503-7766; Robert Wagner, vice president, San Francisco, (415) 953-0484.
C.M. professionals: 60
Bank of America's Corporate Payments Division has stand-alone lockbox processing facilities in San Francisco, Los Angeles and Seattle.
Terminal-initiated services include foreign exchange exposure management and debt management.
Bank of America has an overseas lockbox site in Amsterdam.
The bank's consulting group uses the UAI model. The group also does treasury reviews (domestic and international) and bank analysis.
Its account reconciliation package is proprietary; its treasury workstation was developed in-house with ADS.

Bank of Boston

100 Federal St., Boston, Mass. 02110; (617) 434-3870

Executive: Stephen J. MacQuarrie, division executive.
Contact: Susan M. Rugnetta, assistant vice president and senior manager.
C.M. professionals: 30
Bank of Boston's Cash Management Department is a member of the Imagenet lockbox network.
The bank has its own balance reporting system, Bostonet. Terminal-initiated services not on the chart include ACH.
The bank has international lockboxing sites in Canada, London, Frankfurt, Paris and Luxembourg.
Bank of Boston uses the UAI model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc.

Bank of Delaware

300 Delaware Ave., Wilmington, Del. 19899; (302) 429-1211

Fortune 1000 lockbox clients: 25
Fortune 1000 disbursement clients: 100
Fortune 1000 total clients: 200
Financial services clients: 1,500
Executive: Gale D. Lattanzio, cash management sales consultant.
Contact: Ms. Lattanzio.
C.M. professionals: 4
Bank of Delaware's Cash Management Sales/Consulting Department uses the ADP Network Services balance reporting system.
It uses the Trans Data model for lockbox/disbursement studies.
The account reconciliation package was developed by Disc Inc.

Bank IV

P.O. Box 4, Wichita, Kan. 67201-0004; (316) 261-4444

Executive: James Aronis, vice president.
Contact: Roger Elliott, marketing officer.
C.M. professionals: 2
Representative clients: Pizza Hut, Derby Refining, Rent-a-Center, Esmark.
Bank IV Internal Operations — Cash Management uses the BankLink system for its balance reporting.
Its account reconciliation package was developed in-house.

Bank of Hawaii

P.O. Box 2900, Honolulu, Hawaii 96846; (808) 537-8539

Financial services clients: 35
Executive: Roy K. Amemiya Jr., assistant vice president and manager.
Contact: Mr. Amemiya.
C.M. professionals: 5
Representative clients: Amfac, Castle & Cooke, Hawaiian Electric, Sheraton Hotels of the Pacific.
Bank of Hawaii is a member of the US$NET lockbox network.
The bank is a member of the BankLink balance reporting network. Terminal-initiated services not on the chart include transfers between accounts.
Its account reconciliation package was developed in-house.

Bank of New England

28 State St., Boston, Mass. 02106; (617) 742-4000

Executive: John R. Mutschler, senior vice president.
C.M. professionals: 20
Bank of New England's Cash Management Sales Department is a member of the US$NET lockbox network.
It uses BankLink 1 and 2 for its balance reporting.
The consulting group uses the Duke model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc. Its treasury workstation was developed by BankLink 2.

The Bank of New York

48 Wall St., New York, N.Y. 10015; (212) 530-1101

Executive: W. Alden Anderson Jr., senior vice president.
Contact: Mr. Anderson.
The Bank of New York's Cash Management Division operates its own lockbox network with stand-alone lockbox processing facilities in New York City; Harrison, N.Y.; and Newark, Del.
The bank is a member of the Bank of New York Co. Inc.'s disbursement network.
The bank's consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.
Its taxable assets under management were $1 billion as of April 30.
The bank's account reconciliation package is proprietary. Its treasury workstation was developed by Capital Systems Group.

Bank of Oklahoma

P.O. Box 2300, Tulsa, Okla. 74192; (918) 588-6000

Fortune 1000 lockbox clients: 10
Fortune 1000 disbursement clients: 20
Fortune 1000 total clients: 30
Executive: Robert A. McDaniel, senior vice president and manager of corporate services.
Contact: Terry Croll, vice president and sales consultant.
C.M. professionals: 5
Representative clients: Williams Co., Mapco, Cities Service.
Bank of Oklahoma Corporate Services uses the Chase Access system for its balance reporting.
Its consulting group uses the First Chicago or Phoenix-Hecht model for lockbox/disbursement studies. Other consulting services include general cash management system design.
The bank's account reconciliation package was developed by Disc Inc.

The annual survey of cash managers at the nation's largest corporations runs Oct. 27.

Bank One, Dayton

Kettering Tower, Dayton, Ohio 45402; (513) 449-8648

Fortune 1000 lockbox clients: 4
Fortune 1000 disbursement clients: 9
Fortune 1000 total clients: 20
Financial services clients: 11
Executive: A. Richard Parker, vice president.
Contact: Mr. Parker.
C.M. professionals: 6

Bank One, Dayton's Business Services Division uses the BankLink system for its balance reporting.

Terminal-initiated services not on the chart include cash concentration (ACH and DTC).

Its lockbox/disbursement studies are based on the Focus and Duke models.

The division had $31 million in taxable assets under management April 30.

Its account reconciliation package was developed by Disc Inc. and its treasury workstation by ADS Associates.

Bank of Virginia

7 N. Eighth St., Richmond, Va. 23260; (804) 771-7000

Fortune 1000 lockbox clients: 5
Fortune 1000 disbursement clients: 9
Fortune 1000 total clients: 48
Executive: Douglas T. Lubienski, senior vice president.
Contact: Harold L. Hughey Jr., vice president.
C.M. professionals: 12

The Bank of Virginia's Cash Management Department has stand-alone lockbox processing facilities in Springfield, Va., and Baltimore, Md.

The bank uses its own system for balance reporting. Other terminal-initiated services not on the chart include deposit reporting.

The bank's consulting group uses the VAI micromodel & Duke 4.0 model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation was developed by Arthur Young and NDC. Services not specified in the chart include preauthorized checks, government check pickup and freight payment plan.

Barnett Bank

100 Laura St., Jacksonville, Fla. 32212; (904) 791-7720

Executive: Andy Higgins, senior vice president-corporate services.
Contact: Mr. Higgins.
C.M. professionals: 34

Barnett Bank's Cash Management department has stand-alone sites at eight different points in Florida.

The bank has its own balance reporting system.

Its lockbox/disbursement studies are based on the Phoenix-Hecht model.

The bank's account reconciliation package was developed by Disc Inc., and its treasury workstation was developed in-house.

The Boatmen's National Bank of St. Louis

100 N. Broadway, Suite 1080, St. Louis, Mo. 63102; (314) 425-7663

Executive: Allen J. Grieve, vice president and director-corporate services.
Contact: E. Daniel Korshin, vice president-corporate services.
C.M. professionals: 4

The Boatmen's National Bank of St. Louis' Corporate Services is a member of the Regional Bank Corporate Services Group Referral System lockboxing network. The bank offers stand-alone lockbox processing sites in Kansas City, Mo., and Memphis, Tenn.

The bank uses ADP Network Services for its terminal-access balance reporting. Terminal-initiated services not on the chart include ACH debits and credits.

Its account reconciliation package was developed by Disc Inc. Its treasury workstation was developed by ADP/NDC. Other services include deposit consolidation and reconciliation; automated commercial-customer information system (AC-CIS).

Branch Banking and Trust

P.O. Box 1847, Wilson, N.C. 27893; (919) 399-4527

Fortune 1000 lockbox clients: 1
Fortune 1000 disbursement clients: 2
Fortune 1000 total clients: 5
Financial services clients: 10
Executive: George F. Markle, vice president and manager-cash management services.
C.M. professionals: 8

Branch Banking and Trust Co.'s Cash Management Services uses the ADP system for its balance reporting.

Its account reconciliation package was developed by Disc Inc. Its treasury workstation was developed by ADP.

C

Centerre Bank

1 Centerre Plaza, St. Louis, Mo. 63101; (314) 554-6000

Executive: George D. Horn, vice president and manager.
Contact: Mr. Horn.
C.M. professionals: 24

Centerre Bank's Cash Management Division is a member of the Imagenet lockbox network.

The bank's consulting group uses the UAI model for lockbox/disbursement studies.

The bank developed its own treasury workstation.

Central Bank of Denver

1515 Arapahoe St., Denver, Colo. 80292; (303) 893-3456

Executive: Allen K. Thomas, senior vice president.
Contact: Stephen P. Klekotka, assistant vice president and manager-corporate cash management services.
C.M. professionals: 3

Central Bank of Denver's Corporate Cash Management Services is a member of the BankLink balance reporting network.

Its account reconciliation package was developed by Disc Inc.

The Central Trust Co.

The Central Trust Center, Fifth and Main Streets, Cincinnati, Ohio 45202; (513) 651-8687

Fortune 1000 lockbox clients: 15
Fortune 1000 disbursement clients: 20
Fortune 1000 total clients: 30
Executive: Ray Mallory, vice president.
Contact: James G. Hamberg, assistant vice president.
C.M. professionals: 3
Representative clients: Cargill, Cincinnati Bell, MCI, Federated Department Stores.

The Central Trust Co.'s Corporate Services Department uses the Chase Access system for its balance reporting.

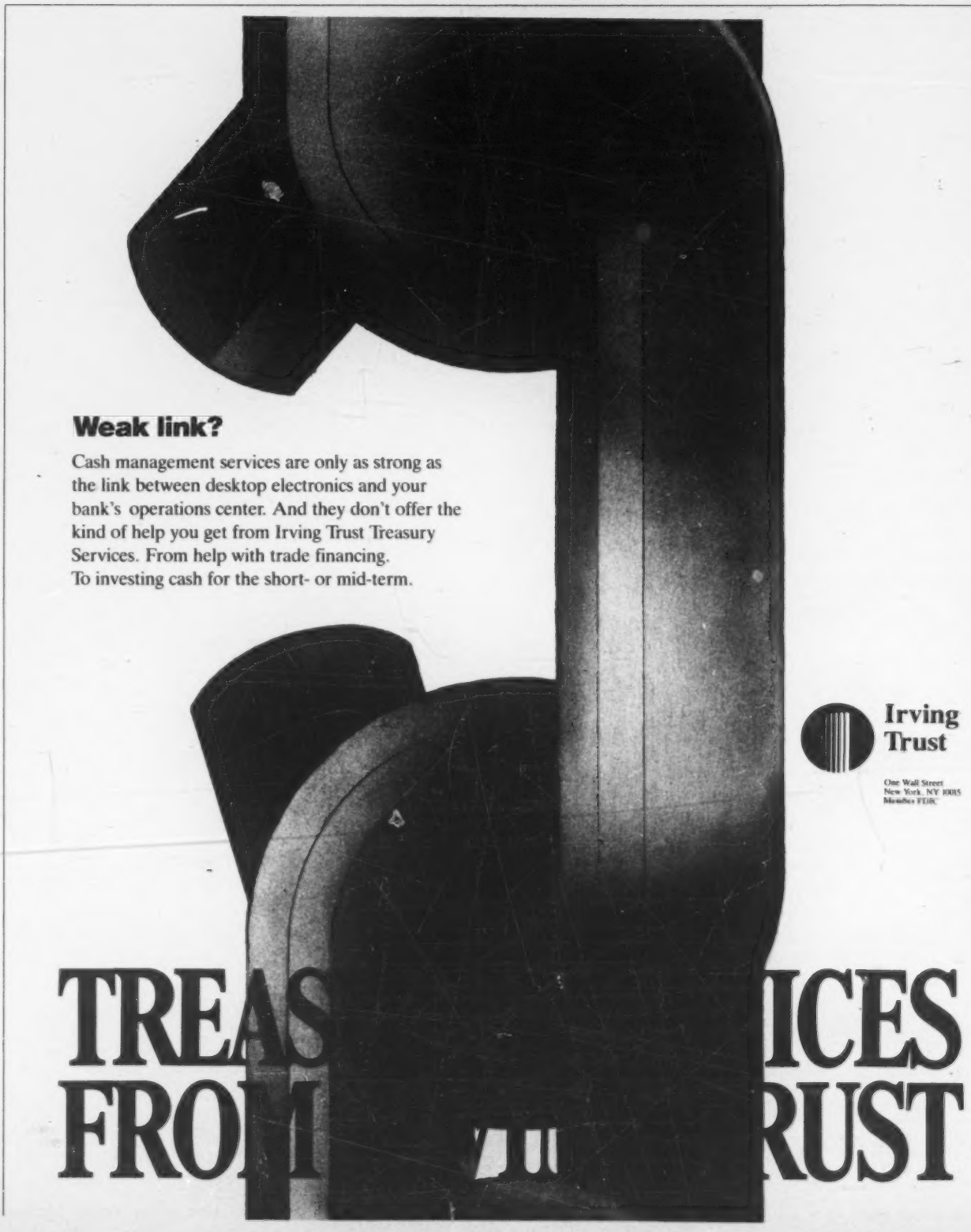
The Phoenix Hecht model is used for lockbox/disbursement studies.

Its account reconciliation package was developed in-house; its treasury workstation was designed by Chase Access.

Chase Lincoln First Bank

1 Lincoln First Square, Rochester, N.Y., 14643; (716) 258-6510

Fortune 1000 lockbox clients: 30
Fortune 1000 disbursement clients: 45
Fortune 1000 total clients: 50
Financial services clients: 5
Executive: Thomas P. Boskow, vice president.



Contact: Georgia T. Lamb.
C.M. professionals: 9
Representative clients: Xerox, Eastman Kodak, Bausch & Lomb, Gannett.
Chase Lincoln First Bank's Cash Management Department uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include DTCs.
The bank's consulting group uses the Duke 4.0 model for lockbox studies; an in-house model is used for disbursements. The group also conducts concentration/diagnostic studies.
The bank's account reconciliation package was developed by Disc Inc. Services not listed on the chart include deposit reconciliation.

The Chase Manhattan Bank

195 Broadway, New York, N.Y. 10007; (212) 669-6040

Fortune 1000 lockbox clients: 50
Fortune 1000 disbursement clients: 380
Executive: Richard Canty, vice president executive.
Contact: James Putnam, vice president.
C.M. professionals: 375
Representative clients: W.R. Grace, Johnson & Johnson, PepsiCo, Pfizer.
The Chase Manhattan Bank's Corporate Industries Sector's terminal-initiated services include ACH/EFT transactions.
The consulting group offers treasury management evaluations, bank evaluations and diagnostic studies.
The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by ICM.

Chemical Bank

380 Madison Ave., New York, N.Y. 10017; (212) 309-5639

Fortune 1000 lockbox clients: 100
Fortune 1000 disbursement clients: 280
Fortune 1000 total clients: 350
Executive: Barbara D. Capsalis, senior vice president.
Contact: Kay T. Shackleton, vice president.
C.M. professionals: 65
Chemical Bank's Financial Services Division has its own lockbox network. The bank has retail lockboxing collection services for scannable retail but not high-volume retail. It has stand-alone lockbox sites in Chicago, Dallas, Los Angeles, New York and Newark.
It had $1.8 billion in taxable assets under management as of April 1986.
The bank uses the comprehensive version of Disc Inc.'s account reconciliation package; its treasury workstation was developed by ICM and customized for Chemical Bank.

Citibank

460 W. 33rd St., New York, N.Y. 10043; (212) 971-2330

Executive: R. Max Gould, senior vice president-CitiCash Management.
Contact: Murray Bolton.
Citibank's CitiCash Management's terminal-initiated services not on the chart include ACH, DTC and reconcilement adjustments.
The bank is able to send corporate trade payments through the ACH, but cannot receive them.
The consulting group uses the Duke/UAI models for lockbox/disbursement studies. Other studies available include global and domestic treasury management reviews, back-office reviews, systems and information analysis consulting, concentration analysis and international netting.
The bank's account reconciliation package and treasury workstation were developed in-house. Other services include global reports and electronic information reporting.

The Citizens and Southern National Bank

P.O. Box 4899, Atlanta, Ga., 30302-4899; (404) 581-3108

Executive: H.B. (Rhen) Cain, executive vice president.
Contact: Mr. Cain and Joe Webb, senior vice president.
C.M. professionals: 22
The Citizens and Southern National Bank's Corporate Cash Management department is a member of the Imagenet lockboxing network. The bank has stand-alone sites in Columbia, S.C., and Tampa, Fla.
It uses the Cash Management Exchange system for its balance reporting. Terminal-initiated services not on the chart include concentration, ACH origination and checking account inquiries.
The bank's consulting group uses UAI micro and 4.0 models for its lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc.; its treasury workstation was developed by Capital Systems. Other services include corporate high-speed deposits, freight payments, payroll services, check safekeeping, preauthorized drafting and cash letters.

City National Bank of Baton Rouge

P.O. Box 1231, Baton Rouge, La. 70821; (504) 377-8406

Executive: William A. Morris.
Contact: Mr. Morris.
C.M. professionals: 4
Representative clients: Lincoln Big Three, Gulf States Utilities, P&C Food Markets, Louisiana Treasury Department.
City National Bank of Baton Rouge's Cash Management Department uses the ADP and FDR systems for its balance reporting.
The bank's account reconciliation program was developed by Florida Software.

Colorado National Banks

P.O. Box 5168, Denver, Colo. 80217; (303) 893-1862

Executive: David E. Skoglund, vice president and manager-cash management division.
Contact: Mr. Skoglund.
C.M. professionals: 7
Colorado National Banks' Cash Management Division uses the National Data Corp. network for balance reporting.
The consulting group uses the University Analytics model for lockbox/disbursement studies, and also conducts cash management system audits for middle-market companies.
The account reconciliation package was developed in-house.

Comerica Bank-Detroit

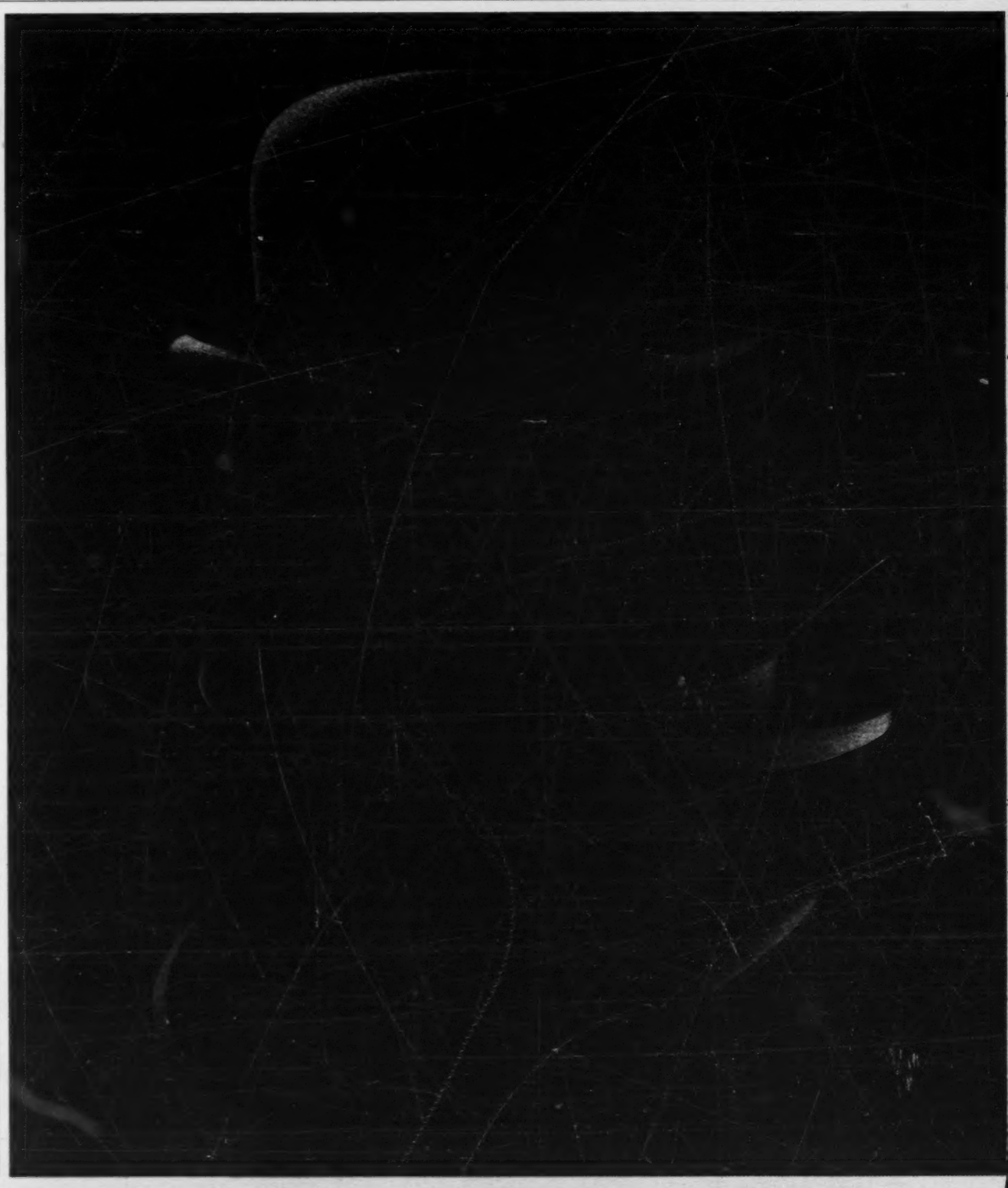
Detroit, Mich. 48275-3054; (313) 496-6819

Executive: Thomas Hector, vice president.
Contact: Margaret Kargol, assistant vice president.
C.M. professionals: 15
Comerica Bank-Detroit's Corporate Cash Management division is a member of the US$NET lockbox network.
It uses the BankLink system for its balance reporting.
The bank's consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by ADS.

Commerce Bank of Kansas City

P.O. Box 248, Kansas City, Mo. 64134; (816) 234-2480

Executive: Jon R. Bakalar, vice president.
Contact: Mr. Bakalar.
C.M. professionals: 7
Commerce Bank of Kansas City's Corporate Services uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include depository transfer checks.
The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.



Its account reconciliation package was developed in-house.

Commerce Union Bank

1 Commerce Place, Nashville, Tenn. 37219; (615) 749-3777

Fortune 1000 total clients: 30
Financial services clients: 15
Contact: Sue K. Veith
C.M. professionals: 7

The consulting group at Commerce Union Bank's Corporate Services Department uses the Duke model for lockbox/disbursement studies.

The bank's account reconciliation package was developed by Disc Inc. Other services include cash forecasting and Intercom — an electronic banking system geared to middle- and lower middle-market customers with many of the same features as a treasury workstation. It provides a direct on-line link between the customer and the bank main frame.

Union funds: Sept. 1

Connecticut Bank and Trust

1 Constitution Plaza, Hartford, Conn. 06115; (203) 244-5000

Executive: Albert C. Hills, senior vice president.
C.M. professionals: 24

Connecticut Bank and Trust Co.'s Corporate Services has stand-alone lockbox processing facilities in Hartford and Stamford, Conn.

The bank uses the BankLink I system for its balance reporting.

Its consulting group uses the Phoenix-Hecht model for lockbox studies.

Its account reconciliation package was developed internally. Other services include deposit tracking and microfilm cross-reference.

Connecticut National Bank

777 Main St., Hartford, Conn. 06115; (203) 728-2000

Executive: Pamela M. Drouin, vice president and manager-cash management sales; Stephen C. Holahan, vice president and manager-cash management and product development.
Contact: Ms. Drouin.
C.M. professionals: 26

Connecticut National Bank's Cash Management Department is a member of the Connecticut National Network. It has stand-alone facilities in Stamford, Conn.

The bank uses ADP for its balance reporting. Terminal-initiated services not on the chart include electronic depository transfers.

Its consulting group use the Duke Release 4.0 model for lockbox studies.

The bank's account reconciliation package was developed in-house; its treasury workstation was developed by Capital Systems Group. Other services include international check clearing.

Continental Bank

1500 Market St., Philadelphia, Pa. 19102; (215) 564-7177

Executive: Thomas M. Mulhern, vice president.
Contact: Mr. Mulhern.
C.M. professionals: 3

Continental Bank's Cash Management Department uses the ADP balance reporting network.

Its lockbox/disbursement studies are based on Phoenix-Hecht/University Analytics models.

The bank's taxable assets under management as of April 30 were between $20 million and $25 million.

Its account reconciliation package was developed by Disc Inc. Other services include depository transfer checks and deposit reporting service.

Continental Illinois National Bank and Trust Co. of Chicago

231 S. LaSalle St., Chicago, Ill. 60697; (312) 828-6600

Fortune 1000 lockbox clients: 700
Fortune 1000 disbursement clients: 500
Fortune 1000 total clients: 700
Financial services clients: 200
Executive: John N. Fix, senior president.
Contact: Patricia P. Scanlon, ond vice president.
C.M. professionals: 102

Continental Illinois' Cash Mana ment Department's terminal-initi services not listed on the chart incl EFT, investing and letters of credit.

The consulting group use the model for lockbox/disbursement dies. Other studies conducted by group include concentration cash forecasting, comprehensive, in-cou and treasury automation review.

The bank's taxable assets ur management as of April 30 were billion.

Its account reconciliation pack was developed in-house. Other vices include Treasury I Account A ysis software.

Cullen Bank

600 Jefferson, Houston, Texas 77002; (713) 652-7600

Fortune 1000 lockbox clients: 2
Executive: Neil A. Wackerma vice president and manager.
Contact: Mr. Wackermann.
C.M. professionals: 1
Representative clients: Lone S Industries, AMF Tuboscope, Exx Triplex.

Cullen Bank's Cash Managem Department uses the BankLink syst for its balance reporting.

Its account reconciliation packa was developed in-house.

When it comes to cash management, one size fits nobody.

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Bankers Trust Company
Cash management, worldwide.

d

Delaware Trust Co.

900 Market St., Wilmington, Del. 19808; (302) 421-7451

Executive: Kemp A. Wright, v president
Contact: Mr. Wright.
C.M. professionals: 1

Delaware Trust's Corporate Re tions' account reconciliation packa was developed by Pep.

Deposit Guaranty National Bank

P.O. Box 1200, Jackson, Miss. 39205; (601) 354-8026

Fortune 1000 lockbox clients: 1
Fortune 1000 disbursement ents: 3
Fortune 1000 total clients: 18
Financial services clients: 11
Executive: Alan Walters, senior vi president.
Contact: Jill Rushing, assistant vi president.
C.M. professionals: 3
Representative clients: Bl Cross/Blue Shield, MS Chemic McRaes, Phillips College.

Deposit Guaranty National Ban Corporate Services uses the NDC n work for balance reporting.

The consulting group uses the Pho nix-Hecht model for lockbox/disburs ment studies.

Its account reconciliation packa was developed by Disc Inc.

e

Equitable Bank

100 S. Charles St., Baltimore, Md 21201; (301) 547-4000

Executive: Robert W. Quinlan, vi president.
Contact: Mr. Quinlan.
C.M. professionals: 12

Equitable Bank's Cash Manageme

Department uses the BankLink system for balance reporting.

The consulting group uses the Duke model for lockbox/disbursement studies.

The bank had $40 million of taxable assets under management as of April 30.

Its account reconciliation package was developed by Disc Inc.

European American Bank

EAB Plaza, Uniondale, N.Y. 11555-2783; (516) 296-5565

Fortune 1000 lockbox clients: 10
Fortune 1000 total clients: 25
Financial services clients: 10
Executive: Louis A. Duchi, assistant vice president, manager.
C.M. professionals: 4

European American Bank's Cash Management Services' account reconciliation package was developed by Disc Inc.; its treasury workstation, by Capital Systems Corp. Other services offered include depository transfer checks.

f

Fifth Third Bank

38 Fountain Square Plaza, Cincinnati, Ohio 45263; (513) 579-4163

Executive: James L. Doepker, vice president.
Contact: Mr. Doepker.
C.M. professionals: 5

The Fifth Third Bank's Cash Management Services is a member of a private lockbox network.

It uses the IDC system for its balance reporting. Terminal-initiated services not listed on the chart include account reconciliations and ACH debits and credits.

The bank has an international lockboxing site in Toronto.

Its consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc. Its treasury workstation was developed by IDC.

First of America Bank — Detroit

645 Griswold, Detroit, Mich. 48226; (313) 965-1900

Fortune 1000 lockbox clients: 4
Fortune 1000 total clients: 12
Executive: Theodore J. Krause, vice president.
C.M. professionals: 6

First of America Bank — Detroit's Corporate Services' account reconciliation package was developed by Disc Inc.

First American National Bank

Fourth and Union, Nashville, Tenn. 37237; (615) 748-2272

Executive: Tipton H. Evans, vice president.
Contact: Mr. Evans.
C.M. professionals: 7

First American National Bank Management/Corporate Services has stand-alone lockbox processing facilities in Memphis and Knoxville, Tenn. and Tri-Cities.

The bank uses Chase Access Services for its balance reporting.

It has international lockboxing sites in Canada and Mexico.

Its account reconciliation package was developed by Disc Inc. Other services include automated payroll and freight payment.

First Bank Minneapolis/St. Paul

120 S. Sixth St., Minneapolis, Minn. 55480; (612) 370-4141, 332 Minnesota St., St. Paul, Minn. 55101; (612) 291-5000

Executive: Louise Miner, vice president.
Contact: Dawn Cole, assistant vice president, manager of sales.
C.M. professionals: 23

The Corporate Cash Management division of First Bank Minneapolis and First Bank St. Paul uses the BankLink system for balance reporting. Other terminal-initiated services not on the chart include ACH transactions.

The consulting group uses the Phoenix-Hecht micro model/Duke 4.0 for its lockbox/disbursement studies.

The banks' treasury workstations were developed by the Capital Systems Group.

First City Bank of Dallas

First City Center, P.O. Box 661700, Dallas, Texas 75266-1700; (214) 939-8150

Executive: Richard F. Hickman, senior vice president.
Contact: Mr. Hickman.
C.M. professionals: 4
Representative clients: Texaco; Genstar; Air Products; Russel.

First City Bank of Dallas' Cash Management Services is a member of the First City Tandem Dallas/Houston lockboxing network. The bank has lockbox processing facilities at the First City National Bank — Houston.

It is a member of the First City proprietary disbursement network.

It uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include ACH and ACH/DTC.

The consulting group uses the UAI microcomputer models for lockbox/disbursement studies, and also offers select treasury management analysis.

Its account reconciliation package was developed by Disc ARP; its workstation by Integrated Cash Management Inc.

First City National Bank — Houston

P.O. Box 2557, Houston, Texas, 77252; (713) 658-5077

Executive: William C. McCain, senior vice president.
Contact: Phillip T. Able, vice president.
C.M. professionals: 24
Representative clients: Exxon, Standard Oil, Baker International, Chevron.

First City National Bank — Houston's Corporate Services is a member of the First City Tandem Dallas/Houston lockboxing network. It has stand-alone lockbox processing facilities in Dallas and Houston.

The bank is a member of the First City proprietary disbursement network.

It uses BankLink for its balance reporting. Terminal-initiated services not on the chart include ACH and ACH/DTC.

The bank has international lockbox sites in Singapore.

Its consulting group uses the UAI microcomputer models for lockbox/disbursement studies, and also offers select treasury management analysis.

Its account reconciliation package was developed by Disc ARP; its treasury workstation by Integrated Cash Management Inc.

First Fidelity Bank

550 Broad St., Newark, N.J. 07192; (201) 565-3387

Fortune 1000 lockbox clients: 125
Fortune 1000 disbursement clients: 250
Fortune 1000 total clients: 325
Financial services clients: 50
Executive: Robert L. Verderame, senior vice president.
Contact: Mr. Verderame.
C.M. professionals: 18

First Fidelity Bank's Cash Management Department uses BankLink for its terminal-access balance reporting system. Other terminal-initiated services include DTC/ACH.

The bank uses the Disc system for its account reconciliation.

Other services include deposit reconciliation and bulk coin and currency.

First Florida Bank

111 Madison St., Tampa, Fla. 33601; (813) 224-1447

Executive: Clint H. Monts de Oca, vice president.
Contact: Corporate Services Department, (813) 224-1425.
C.M. professionals: 6
Representative clients: GE, General Telephone, Maas Brothers — Division of Allied Stores, Conagra.

First Florida Bank's Cash Management Department uses the Chase Access Service for balance reporting. Terminal-initiated service not on the chart include FED wire and ACH.

Its taxable assets under management were $20 million as of April 30.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by Chase Access Services. Other services include deposit reconciliation.

First Interstate Bank of Arizona

114 W. Adams, Phoenix, Ariz. 85003; (602) 271-1297

Financial services clients: 40
Executive: Wilburn J. Brown, vice president and department head.
C.M. professionals: 14

First Interstate Bank of Arizona uses the BankLink system for its balance reporting.

It uses Phoenix-Hecht/University Analytics for its lockbox/disbursement studies. Other studies include endpoint analyses.

Its account reconciliation package was developed by Disc ARP; its treasury workstation, by ADS.

Other services include Moneynet/CDA wire transfers.

First Interstate Bank of Denver

633 17th St., Denver, Colo. 80270; (303) 293-2211

Executive: Betsey LeSuer, vice president.
Contacts: Robert Gates and Kevin Collins, assistant vice presidents.
C.M. professionals: 15

First Interstate Bank of Denver's Non-Credit Marketing Department is a member of the First Interstate lockbox network.

The bank uses the ADP system for its balance reporting. Terminal-initiated services not on the chart include internal transfers and domestic and international money market rate reports.

The consulting group uses UAI model for lockbox/disbursement studies. The group also offers UAI 4.0 studies.

The bank's account reconciliation package was developed by Disc ARP; its treasury workstation, by ADS.

Other services offered include First Interstate automated cash concentrator, corporate cash letters, credit account reconciliation program, automatic standing transfer and MIS reporting.

First Interstate Bank Ltd.

707 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-3874

Fortune 1000 lockbox clients: 425
Fortune 1000 disbursement clients: 350
Fortune 1000 total clients: 600
Financial services clients: 200
Executive: Russell K. Snow Jr., senior vice president and manager-corporate financial services.
Contact: Jan R. Cloyde, vice president and manager-cash management sales and services.
C.M. professionals: 80

First Interstate Bank Ltd.'s Corporate Financial Services Group has its own lockbox network.

It uses the BankLink system for balance reporting. Terminal-initiated services not on the chart include ACH/DTC.

Its consulting group uses the UAI lockbox model, and also offers banking services proposals and cash management system analysis.

The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by ADS.

First Interstate Bank of Oregon

P.O. Box 3131, Portland, Ore. 97208; (503) 225-3529

Executive: Charles A. Smart
Contact: Jeanne Rohlf
C.M. professionals: 7

First Interstate Bank of Oregon's Cash Management Services Department uses the First Interstate lockbox network. Stand-alone lockbox processing facilities are available at First Interstate affiliates.

The bank uses the First Interstate disbursement network.

It uses the BankLink system for balance reporting. Terminal-initiated services not on the chart include ACH/DTC.

Its consulting group uses the UAI lockbox model, and also offers banking services proposals and cash management system analysis.

The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by ADS.

First Interstate Bank of Utah

180 S. Main St., Salt Lake City, Utah 84142; (801) 350-7057

Fortune 1000 lockbox clients: 2
Fortune 1000 disbursement clients: 1
Fortune 1000 total clients: 3
Executive: John E. Day, vice president and manager.
Contact: Mr. Day.
C.M. professionals: 5

First Interstate Bank of Utah's Cash Management Department uses the First Interstate lockboxing network.

Its uses the BankLink system for balance reporting. Terminal-initiated services not on the chart include ACH.

Its taxable assets under management were $20 million as of April 30.

The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by ADS.

First Interstate Bank of Washington

999 Third Ave., Seattle, Wash. 98111; (206) 343-2238

Fortune 1000 lockbox clients: 15
Fortune 1000 disbursement clients: 18
Fortune 1000 total clients: 41
Executive: Kathy Mather, vice president and manager.
Contact: Ms. Mather.
C.M. professionals: 4

First Interstate Bank of Washington's Corporate Banking Services/Cash Management Sales Department uses the First Interstate lockboxing network.

It uses the BankLink system for balance reporting. Terminal-initiated services not on the chart include DTCs.

The bank's consulting group uses the University Analytics model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by ADS.

First Jersey National Bank

1 Exchange Place, Jersey City, N.J. 07302; (201) 547-7000

Contact: C. Jean Gioioso, assistant vice president.
C.M. professionals: 5

First Jersey National Bank's Commercial Services' account reconciliation package was developed by Florida Software.

A directory of real estate investment advisers and a ranking of these firms is scheduled for the Sept. 15 issue of *P&I Age*.

First National Bank in Albuquerque

P.O. Box 1305, Albuquerque, N.M. 87103; (505) 765-4190

Executive: Fred M. Spuhler, senior vice president.
Contact: Mr. Spuhler.
C.M. professionals: 4
Representative clients: Public Service Co. of New Mexico, New Mexico state, Smiths Management Group, Furr's Inc.

First National Bank in Albuquerque's Corporate Cash Management Department uses both the NDC system and an in-house-developed system for balance reporting. It plans to use terminal-initiated wire transfers starting in September. Other terminal-initiated services not on the chart include transfer between accounts and lines of credit.

The bank provides an automated account sweep into repos.

The First National Bank of Chicago

1 First National Plaza, Suite 0196, Chicago, Ill. 60670; (312) 732-9038

Fortune 1000 lockbox clients: 300
Fortune 1000 disbursement clients: 700
Fortune 1000 total clients: 700
Financial services clients: 250
Executive: Lawrence C. Russell, executive vice president.
Contact: Scott E. Bates, senior vice president.
C.M. professionals: 1,000
Representative clients: GM, AT&T, State Farm Insurance, Amoco.

First National Bank of Chicago's Service Products Group has its own lockboxing network. It has stand-alone lockbox processing facilities in Secaucus, N.J.; Dallas; Atlanta; and Los Angeles.

Terminal-initiated services not listed on the chart include check reconcilement, statement reconcilement, money transfer and shareholder services.

Its consulting group offers opportunity audits and trade payment systems.

Its account reconciliation system and treasury workstation were developed in-house.

First National Bank of Cincinnati

425 Walnut St., Cincinnati, Ohio 45202; (513) 632-4017

Fortune 1000 lockbox clients: 30
Fortune 1000 disbursement clients: 10
Fortune 1000 total clients: 60
Financial services clients: 100
Executive: James C. Rolfes, vice president.
Contact: Mr. Rolfes.
C.M. professionals: 4
Representative clients: Procter & Gamble, U.S. Shoe, U.S. Steel, Champion International.

First National Bank of Cincinnati Corporate Services uses the BankLink system for its balance reporting.

Its consulting group uses the University Analytics model for lockbox/disbursement studies.

The bank's account reconciliation package was developed by Disc Inc.

First National Bank of Louisville

P.O. Box 36000, Louisville, Ky. 40233; (502) 581-5345

Fortune 1000 lockbox clients: 50
Fortune 1000 disbursement clients: 5
Fortune 1000 total clients: 57
Financial services clients: 20
Executive: Daugherty Murphy, vice president.
Contact: Mr. Murphy.
C.M. professionals: 12

First National Bank of Louisville Corporate Product Management and Development has stand-alone lockbox processing facilities in Louisville, Phoenix, Dallas and Chicago.

The bank uses the Chase Access Services system for its balance reporting. Terminal-initiated services not on the chart include cash concuntration.

Its study group uses the Phoenix-Hecht model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by Chase Access Services (formerly IDC).

First National Bank of Maryland

P.O. Box 1596, Baltimore, Md. 21203; (301) 244-3890

Executive: J. William Murray, senior vice president.
Contact: Mark Furst, vice president.
C.M. professionals: 19

First National Bank of Maryland's Cash Management Division is a member of the US$NET lockbox network. It has a mail intercept facility in Washington.

The bank uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include ACH and concentration.

Its consulting group use UAI/Phoenix-Hecht models for lockbox/disbursement studies.

Its account reconciliation package was developed in-house; its treasury workstation was developed by MicroCTS. Other services include freight payment, cash processing, branch consolidation or deposit reconciliation.

First National Bank of Omaha

1 First National Center, Omaha, Neb. 68102; (402) 341-0500

Fortune 1000 lockbox clients: 2
Fortune 1000 disbursement clients: 4
Fortune 1000 total clients: 15
Financial services clients: 16
Executive: Elias Eliopoulos.
Contact: Lori Klein, manager-cash management marketing.
C.M. professionals: 3
Representative clients: Mutual of Omaha, Physicians Mutual Insurance, Baker's Supermarkets, InterNorth.

First National Bank of Omaha's Cash Management Marketing Department uses the Interactive Data Corp. system for its balance reporting.

Its consulting group uses Phoenix-Hecht's micro model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.

First National Bank and Trust Co.

P.O. Box 1, Tulsa, Okla. 74193; (918) 586-5836

Financial services clients: 10
Executive: Virgil E. Daniels, vice president and manager-cash management department.
Contact: Jean Nelson, administrative assistant-cash management department.
C.M. professionals: 5

First National Bank and Trust Co.'s Corporate Cash Management Department uses the National Data Corp. system for its balance reporting. Terminal-initiated services not on the chart include treasury management systems.

The consulting group uses the Phoenix-Hecht/Duke model for lockbox/disbursement studies.

The bank's account reconciliation package was developed by Disc Inc.'s ARP; its treasury workstation, by National Data.

The First National Bank & Trust Co. of Oklahoma City

P.O. Box 25189, Oklahoma City, Okla. 73125; (405) 272-4962

Fortune 1000 lockbox clients: 10
Fortune 1000 disbursement clients: 10
Fortune 1000 total clients: 25
Financial services clients: 22
Executive: Robert A. Horn, senior vice president.
Contact: John L. Stiles, vice president.
C.M. professionals: 7

The First National Bank & Trust Co. of Oklahoma City's Commercial Services Sales/Support Department uses the IDC system for its balance reporting. Terminal-initiated services not on the chart include ACH origination.

Its consulting group uses the University Analytics model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc. Its treasury workstation was developed by MicroCTS/IDC TMS. Other services include a payment management system.

A polling of chief investment officers on the quality of Wall Street research: Sept. 29.

First Pennsylvania Bank

P.O. Box 7558, Philadelphia, Pa. 19101; (215) 786-7834

Fortune 1000 lockbox clients: 64
Fortune 1000 disbursement clients: 15
Fortune 1000 total clients: 273
Financial services clients: 45
Executive: William F. Githens, senior vice president.
Contact: William C. Garver, vice president.
C.M. professionals: 16
Representative clients: Pennwalt Corp., Certainteed Corp., General Accident, Alco Standard Corp.

First Pennsylvania Bank's Commercial Banking Services Department uses ADP-network services for its balance reporting. Terminal-initiated services not on the chart include ACH entries.

The consulting group uses the Duke model for lockbox/disbursement studies.

Taxable assets under management April 30 totaled $2.5 million.

Its account reconciliation package was developed by Disc Inc.

First Tennessee Bank National Association

165 Madison Ave., Memphis, Tenn. 38103; (901) 523-4770

Fortune 1000 lockbox clients: 130
Fortune 1000 disbursement clients: 80
Fortune 1000 total clients: 225
Financial services clients: 18
Executive: Phillip L. White, senior vice president.
Contact: Mr. White.
C.M. professionals: 9
Representative clients: Malone & Hyde, W.R. Grace & Co., Federal Express, Holiday Corp.

First Tennessee's Cash Management Department uses the IDC system for its balance reporting.

Its study group uses the Phoenix-Hecht model for lockbox/disbursement studies. Other consulting services include cash management consulting studies.

The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by IDC. Other services include automated cash concentration system.

First Union National Bank

301 S. Tryon St., Charlotte, N.C. 28288; (704) 374-6211

Fortune 1000 lockbox clients: 5
Fortune 1000 disbursement clients: 80
Fortune 1000 total clients: 100
Financial services clients: 25
Executive: Abbott Whitney, senior vice president and director of servicenter administration.
Contact: LuAnn Loeber, vice president and manager of cash management.
C.M. professionals: 52
Representative clients: J.P. Stevens, CBS, Douglas, Church's Fried Chicken.

All of the state-of-the-art, hi-tech mumbo-jumbo in the world won't help a bit unless your priorities are straight.

A lot of banks spend a lot of time throwing around a lot of buzzwords. And while our automated lockbox system does have its share of "leading-edge" technology, its most important benefit is more common sense than hi-tech.

We know when to move what, where.
Thanks to a unique feature that allows us to capture items up front, we can prioritize your checks before they're processed. That way, we can process high-dollar and time-critical checks right away.

So you get better availability.
Which means we don't miss important check-clearing deadlines, and you don't miss out on potential profits. And out of all the scientific innovation talked about these days, that's something everyone can understand.

Without giving up flexibility.
Our system is parameter-driven. Which means we can easily meet your more specialized needs. So if you want three copies of each check sent to three different locations, all you have to do is ask.

Or an arm and a leg.
To find out just how easy opening a lockbox with us can be, simply pick up the nearest state-of-the-art phone and call (713) 751-6416. You'll be relieved to hear we speak English, not mumbo-jumbo.

MBank Houston
A Momentum Bank

First Union National Bank's Corporate Services Department uses the ADP system for its balance reporting.

The consulting group uses the Phoenix-Hecht model for lockbox studies and an in-house model for disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by MicroCTS.

First Union National Bank of Florida

P.O. Box 2080, Jacksonville, Fla. 32231-0010; (904) 632-6491

Fortune 1000 lockbox clients: 15
Fortune 1000 disbursement clients: 11
Fortune 1000 total clients: 88
Financial services clients: 35
Executive: Raymond A. Breault, vice president-manager.
Contact: Mr. Breault.
C.M. professionals: 12

First Union National Bank of Florida Corporate Financial Services has stand-alone lockbox processing facilities in Orlando, Tampa, Pompano and Jacksonville.

It uses the NDC system for balance reporting. Terminal-initiated services not on the chart include concentration and ACH transfers.

Its consulting group uses the Duke 3.0 model for lockbox/disbursement studies.

The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by Capital Systems Group/MicroCTS. Other services include freight payment.

First Wachovia Corp.

P.O. Box 3099, Winston-Salem, N.C. 27150, (919) 770-5496; Peach Tree St. N.W., Atlanta, Ga. 30383; (404) 588-5788

Executive: Jack M. Meckler, group vice president, Winston-Salem.
Contact: Donald M. MacLeod, vice president, Atlanta.
C.M. professionals: 50

First Wachovia Corp.'s Cash Management Group, First Wachovia Corporate Services Inc., has its own national lockbox network with stand-alone lockbox processing facilities in Atlanta, Charlotte, N.C., and Dallas.

It uses the BankLink system for its balance reporting and also offers an in-house proprietary system, the First Wachovia Direct Connection. Terminal-initiated services not on the chart include concentration and ACH.

The bank's consulting group uses the UAI latest release model for lockbox/disbursement studies. Other consulting services include overall cash management, export receivables and treasury automation.

Its account reconciliation package was developed by Disc Inc. Other services include weekend concentration, pre-encoded deposits, cash management forum and cash management seminars.

Fleet National Bank

111 Westminster St., Providence, R.I., 02903; (401) 278-5522

Fortune 1000 lockbox clients: 2
Fortune 1000 disbursement clients: 2
Fortune 1000 total clients: 4
Financial services clients: 15
Executive: Scott W. Fuller, vice president and manager-cash management.
Contact: Fran Dale, assistant vice president and manager-cash management sales.
C.M. professionals: 7

Fleet National Bank's Cash Management Department uses the Chase Access Services system for its balance reporting.

Its consulting group uses the First Chicago model for lockbox/disbursement studies.

Florida National Bank

225 Water St., Jacksonville, Fla.

Fortune 1000 lockbox clients: 5
Fortune 1000 disbursement clients: 2
Financial services clients: 10
Executive: Paul B. Hyson, vice president.
C.M. professionals: 15
Representative clients: Alliance Mortgage Co., Gulf Life Insurance Co., City of Jacksonville, St. Joe Paper Co.

Florida National Bank's Corporate Cash Management Department uses BankLink, MicroLink and Pronto for its balance reporting.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by Chemical Technologies Corp. Other services offered include Pronto home and small business banking information system.

Frost National Bank

100 W. Houston, San Antonio, Texas 78296; (512) 220-5762

Fortune 1000 lockbox clients: 1
Fortune 1000 disbursement clients: 2
Financial services clients: 5
Executive: Tom Frost III, senior vice president.
Contact: Martin Polka, cash manager — Ellison Industries.
C.M. professionals: 3

Frost National Bank's Cash Management Marketing Department uses the BankLink system for its balance reporting.

Its account reconciliation package was developed in-house.

h

Harris Bank

111 W. Monroe St., Chicago, Ill. 60690; (312) 461-2121

Fortune 1000 lockbox clients: 400
Fortune 1000 disbursement clients: 100
Fortune 1000 total clients: 500
Financial services clients: 15
Executive: Roger A. Molzahn, senior vice president.
Contact: Kevin M. Connelly, vice president.
C.M. professionals: 57
Representative clients: Johnson & Johnson, Dun & Bradstreet, American Express, Motorola.

Harris Bank's Financial Services Group is a member of the Imagenet lockbox network.

It uses the BankLink system for balance reporting. Other terminal-initiated services not on the chart include DTCs, ACH credits and wires.

Its consulting group uses the University Analytics model for lockbox/disbursement studies.

The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by ICM and BankLink. Services not specified on the charts include coin and currency.

The Huntington National Bank

41 S. High St., Columbus, Ohio 43287; (614) 463-4750

Fortune 1000 lockbox clients: 30
Fortune 1000 disbursement clients: 25
Fortune 1000 total clients: 60
Financial services clients: 130
Executive: Penelope C. Bach, vice president.
Contact: David Tate, assistant vice president (northwest and central Ohio); Jerry Meyer, assistant vice president (southwest Ohio); Frank Golling, assistant vice president (northeast Ohio).
C.M. professionals: 14

The Huntington National Bank's Cash Management Division uses the NDC system for its balance reporting. Terminal-initiated services not on the chart include ACH and internal transfers.

nix-Hecht model for lockbox/disbursement studies.

The bank provides non-commingled cash portfolio management through its trust department only.

Its account reconciliation package was developed in-house; its treasury workstation, by ADS. Other services offered include deposit reconciliation.

i

Idaho First National Bank

P.O. Box 8247, Boise, Idaho 83733; (208) 383-7349

Fortune 1000 disbursement clients: 5
Fortune 1000 total clients: 10
Financial services clients: 1
Executive: John Englehardt, assistant treasurer, Aristar Inc.
Contact: John Danielson, director of cash management, Albertsons Inc.
C.M. professionals: 7
Representative clients: Morrison-Knudsen, Albertsons Inc., Boise Cascade, Harrahs-Holiday Inns.

Idaho First National Bank's Business Services Division uses the ADP system for its balance reporting.

Services not on the chart include balance reporting, cash concentration, automated accounting programs and payroll services.

Indiana National Bank

1 Indiana Square, Indianapolis, Ind. 46266; (317) 266-6000

Fortune 1000 lockbox clients: 3
Fortune 1000 disbursement clients: 2
Fortune 1000 total clients: 12
Executive: Marsha Jay, assistant vice president.
Contact: Ms. Jay.
C.M. professionals: 5
Representative clients: Bindley Western, Ransburg, RCA, Inland Container.

Indiana National Bank Corporate Sales uses the NDC system for its balance reporting.

The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.

Interfirst Bank Dallas

1401 Elm, Dallas, Texas 75283; (214) 977-4025

Fortune 1000 lockbox clients: 191
Fortune 1000 disbursement clients: 163
Fortune 1000 total clients: 300
Executive: Zackie Wisdom, senior vice president.
Contact: Mr. Wisdom.
C.M. professionals: 16

Interfirst Bank Dallas' Corporate Cash Management Department is a member of the Interfirst lockbox network.

Terminal-initiated services not on the chart include ACH.

The consulting group uses the UAI model for lockbox/disbursement studies.

The group also offers ACH conversion and endpoint analysis.

Irving Trust

1 Wall St., New York, N.Y. 10015; (212) 815-6300

Executive: Kenneth J. Soldwedel, vice president and manager.
Contact: Mr. Soldwedel.
C.M. professionals: 45

Irving Trust's Treasury Services Department has stand-alone lockbox processing facilities in Newark, N.J.

The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.

The group offers diagnostic services as well.

Its account reconciliation package

k

Key Bank

60 State St., Albany, N.Y. 12207; (518) 447-3539

Fortune 1000 disbursement clients: 12
Fortune 1000 total clients: 6
Financial services clients: 10
Executive: Linette A. Christiansen, vice president.
Contact: Kelly A. Mansfield, cash management officer.
C.M. professionals: 4

The Special Services Department of the Cash Management Division of Key Bank provides non-commingled cash portfolio management through an affiliate, Key Trust Co.

The department is now in the process of converting to Disc for its account reconciliation.

l

LaSalle National Bank

135 S. LaSalle St., Chicago, Ill. 60690; (312) 443-2000

Financial services clients: 50
Executive: Michael D. Lindsey, vice president.
Contact: Mr. Lindsey.
C.M. professionals: 7

LaSalle National Bank's Cash Management Division uses the ADP system for its balance reporting.

The consulting group uses various models for lockbox/disbursement studies.

Its account reconciliation package was developed in-house; its treasury workstation, by Integrated Cash Management Systems.

Liberty National Bank

416 W. Jefferson St., Louisville, Ky. 40202; (502) 566-2494

Fortune 1000 lockbox clients: 3
Fortune 1000 disbursement clients: 2
Fortune 1000 total clients: 5
Executive: John D. Sweeney, senior vice president.
Contact: Mr. Sweeney.
C.M. professionals: 5
Representative clients: Coca-Cola, Brown-Forman, Blue Cross/Blue Shield, Humana.

Liberty National Bank's Corporate Cash Management Department uses the NDC system for its balance reporting. Terminal-initiated services not on the chart include deposit reporting and treasury management system.

The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by NDC.

The Liberty National Bank and Trust Co. of Oklahoma City

P.O. Box 25848, Oklahoma City, Okla. 73125; (405) 231-6852

Fortune 1000 lockbox clients: 5
Fortune 1000 total clients: 5
Contact: John P. Jewell, assistant vice president.
C.M. professionals: 4
Representative clients: Santa Fe Railroad, Exxon, Macklanburg-Duncan.

The Liberty National Bank and Trust Co. of Oklahoma City's Commercial Cash Management Department uses the Cash Management Exchange system for its balance reporting.

Its account reconciliation package

sury workstation, by National Data Corp.

m

Manufacturers Hanover

270 Park Ave., New York, N.Y. 10017; (212) 286-6000

Executive: James P. Wilkins, vice president.
C.M. professionals: 145

Manufacturers Hanover's Financial Services Group is a member of the US$NET lockbox network.

It uses the National Data Corp. balance reporting system for data exchanges with other banks. Terminal-initiated stop payments are available in New York; controlled disbursement in Delaware.

Other terminal-initiated services not on the chart include global exposure and global account reports.

The bank has international lockboxing sites in London, Toronto, Frankfurt and Milan.

The consulting group uses the UAI-Duke model LBX-4.0, DSB-3.0; the group also offers treasury consulting.

Its treasury workstation was developed in-house by MH Financial Management Systems Inc.

The IBM system was developed by MH Financial Management Systems Inc. in conjunction with ADS.

Manufacturers National Bank of Detroit

Renaissance Center — Tower 100, Detroit, Mich. 48243; (313) 222-4454

Fortune 1000 lockbox clients: 60
Fortune 1000 disbursement clients: 35
Fortune 1000 total clients: 95
Financial services clients: 14
Executive: Thomas B. Craigie, vice president and senior corporate services officer.
Contact: Henry Seavitt, second vice president.
C.M. professionals: 9
Representative clients: Ford, National Steel, Taubman, Detroit Edison.

Manufacturers National Bank's Corporate Services Department uses the BankLink system for its balance reporting.

Its consulting group uses the University Analytics model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.

Other services offered include U.S. savings bonds issuance.

Manufacturers & Traders Trust Co.

1 M&T Plaza, Buffalo, N.Y. 14240; (716) 626-3787

Financial services clients: 300
Executive: J.R. Bindhammer, assistant vice president.
Contact: Alan A. DiGrace, banking officer.
C.M. professionals: 2

Manufacturers & Traders Trust Co.'s Commercial Services Department uses the Chase Access Services system for its balance reporting.

Its account reconciliation package was developed in-house (ARP-Disc).

Marine Bank

111 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 765-2814

C.M. professionals: 4

Marine Bank uses the BankLink system for its balance reporting.

It uses the Phoenix-Hecht model for lockbox/disbursement studies. Its account reconciliation package was

Marquette Bank Minneapolis

Sixth and Marquette, Minneapolis, Minn. 55480; (612) 341-5650

Financial services clients: 185
Executive: Reid Evenson, assistant vice president and manager-cash management.
Contacts: Diane Hefner and Mary Dredge, assistant vice presidents-cash management.
C.M. professionals: 3
Marquette Bank Minneapolis' Cash Management Department uses the ADP system for its balance reporting.
The bank's account reconciliation package, IRP, was developed by Systematics.

MBank Houston

P.O. Box 2629, Houston, Texas 77252; (713) 751-6100

Fortune 1000 lockbox clients: 35
Fortune 1000 disbursement clients: 15
Fortune 1000 total clients: 79
Financial services clients: 50
Executive: Stephen M. Samford, vice president.
Contact: Dean V. Loehr, vice president.
C.M. professionals: 13
Representative clients: Exxon, Ingersoll-Rand, Armco Steel, PPG Industries.
MBank Houston's Corporate Services Department uses the Chase Access Services system for its balance reporting. Terminal-initiated services not on the chart include ACH.
The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc On-line; its treasury workstation, by Chase Access Services. Other services offered include freight payment.

Mellon Bank

1250 1 Mellon Bank Center, Pittsburgh, Pa. 15258-0001; (412) 234-8930

Fortune 1000 total clients: 250
Financial services clients: 45
Executive: Theodore M. Mertz, senior vice president.
Contact: Edward J. Pierson, vice president.
C.M. professionals: 250
Mellon Bank's Global Cash Management Group has stand-alone lockbox processing facilities in Pittsburgh, Philadelphia, Boston, Dallas, Los Angeles and Chicago.
Terminal-initiated services not on the chart include concentration of funds, automated investment, automated borrowing, intracompany or corporate-vendor funding.
The bank has international lockbox collection sites in London and Toronto.
The consulting group uses the UAI model, and a mainframe and micro model developed in-house for lockbox/disbursement studies. The group also offers working capital and international treasury consulting, bank price analyzer, bank balance analyzer and corporate electronic payment evaluation models.
The bank had taxable assets of $4.1 billion under management as of April 30.
Multitiered zero-balance account services can be simulated through Telecash.
The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by Mellon Bank.

Mercantile Bank

P.O. Box 524, St. Louis, Mo. 63166; (314) 425-8366

Fortune 1000 lockbox clients: 65
Fortune 1000 disbursement clients: 45
Fortune 1000 total clients: 160
Financial services clients: 11
Executive: Leo M. Malone, senior
Contact: Mr. Malone.
C.M. professionals: 17
Mercantile Bank's Financial Services Division uses the National Data Corp. for its balance reporting.
Its consulting group uses the Duke 4.0 model for lockbox/disbursement studies. The group also offers current system reviews.
The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by Capital Systems MicroCTS.

Merchants National Bank & Trust Co. of Indianapolis

1 Merchants Plaza, Indianapolis, Ind. 46255; (317) 267-7572

Executive: Laura A. Bonsett, vice president and manager-corporate services.
Contact: Ms. Bonsett.
C.M. professionals: 7
Representative clients: Indiana Gas, Associated Dry Goods, Indiana Farm Bureau Co-op.
Merchants National Bank & Trust Co. of Indianapolis' Corporate Services Department uses the BankLink system for balance reporting.
The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by BankLink.

Meridian Bank

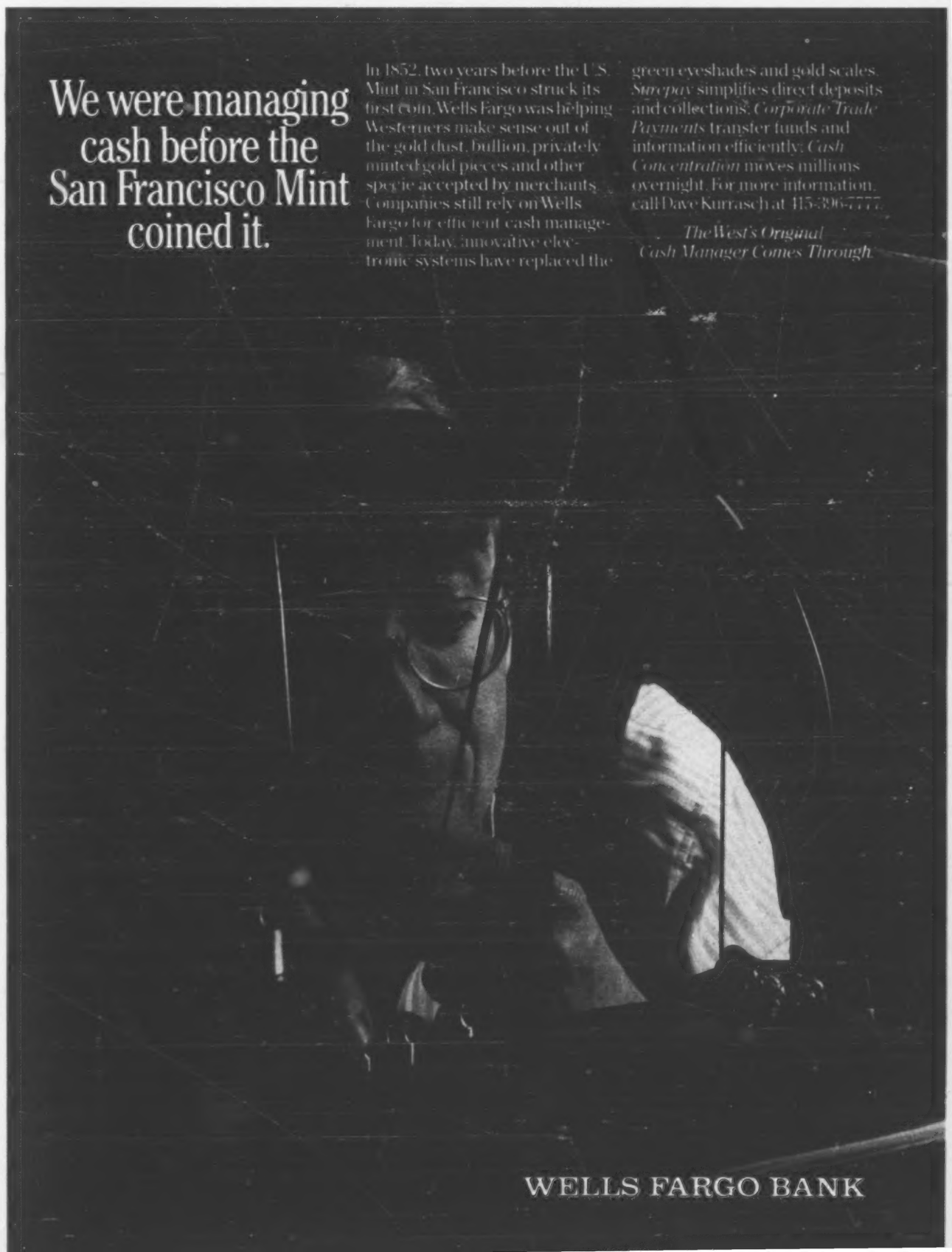
P.O. Box 1102, Reading, Pa. 19603; (215) 320-2909

Fortune 1000 total clients: 27
Executive: Leonard J. Keating, senior vice president.
Contact: Mari A. Prudente, assistant vice president.
Meridian Bank's Corporate and Financial Services Division has stand-alone lockbox processing facilities in Philadelphia and Reading, Pa.
It uses the Chase Access Services system for its balance reporting. Terminal-initiated services not on the chart include depository transfer.
The consulting group uses the UAI micro model for lockbox/disbursement studies. The group also offers cash concentration and cash management system design.
Its account reconciliation package was developed by Disc Inc. Other services include lockbox data transmission, automatic payback (to line of credit), pre-encoded deposits, bulk cash processing, correspondent banking and over-the-counter collections for utilities.

Michigan National Corporation Banks

100 N. Crooks, Clawson, Mich. 48017; (313) 280-6200

Executive: John P. Finerty.
Contact: Daniel Pearce.
C.M. professionals: 15
Michigan National Corporation Banks' Service Products Division uses the ADP system for balance reporting.



The consulting group uses the First Chicago model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc; its treasury workstation, by Capital Systems.

Midlantic Banks Inc.

Metro Park Plaza — P.O. Box 600, Edison, N.J. 08818; (201) 321-8000

Fortune 1000 lockbox clients: 50
Fortune 1000 disbursement clients: 35
Fortune 1000 total clients: 35
Financial services clients: 20
Executive: Charles A. Assdin, vice president-corporate services.
Contact: Keith Kulper, vice president-cash management.
C.M. professionals: 7

Midlantic Bank's Corporate Services Department has stand-alone lockbox processing facilities in Philadelphia.

It uses the ADP system for its balance reporting.

The consulting group uses the Duke model (using an outside vendor) for lockbox/disbursement studies.

The bank's taxable assets under management as of April 30 were $75 million.

Its account reconciliation was developed in-house; its treasury workstation, by ADP. Other services offered include currency.

M&I Marshall & Ilsley Bank

770 N. Water St., Milwaukee, Wis. 53202; (414) 765-7950

Fortune 1000 lockbox clients: 30
Fortune 1000 disbursement clients: 10
Fortune 1000 total clients: 50
Financial services clients: 20
Executive: John G. McGlynn, assistant vice president.
Contact: Mr. McGlynn
C.M. professionals: 7

M&I Marshall & Ilsley Bank's Corporate Services Department uses the Automatic Data Processing system for its balance reporting.

The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.

Its account reconciliation package was developed in-house.

Morgan Guaranty Trust Co.

23 Wall St., New York, N.Y. 10015; (212) 483-1252

Fortune 1000 disbursement clients: 300
Fortune 1000 total clients: 750
Financial services clients: 100
Executive: John W. Field Jr., senior vice president.
Contact: James Van Wagner, vice president.
C.M. professionals: 50
Representative clients: IBM, GM, Procter & Gamble, Prudential.

The consulting group of Morgan Guaranty Trust Co.'s Operations Services Department offers studies in treasury management, concentration, disbursement and international money transfer.

Its account reconciliation package was developed by Disc Comprehensive.

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National Bank of Detroit

611 Woodward Ave., Detroit, Mich. 48226; (313) 225-3678

Fortune 1000 lockbox clients: 83
Executive: Peter J. Stein, vice president and manager.
Contact: Mr. Stein.

National Bank of Detroit's Corporate Cash Management Department's terminal-initiated services not on the chart

The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation was developed in-house.

National City Bank

E. Ninth and Euclid Ave., Cleveland, Ohio 44101; (216) 575-2417

Fortune 1000 lockbox clients: 200
Fortune 1000 disbursement clients: 80
Fortune 1000 total clients: 375
Executive: Gary P. Obers, vice president, and Robert B. Bargar.
Contact: Mr. Obers
C.M. professionals: 20

National City Bank's Corporate Cash Management Department is a member of the US$NET lockbox network.

The bank uses the ADP system for its balance reporting. Terminal-initiated services not on the chart include ACH credits and debits.

The consulting group uses the UAI Model Release 4.0 model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc. The treasury workstation was developed by Capital Systems Group. Other services include deposit reconciliation.

National Westminster Bank

175 Water St., New York, N.Y. 10038; (212) 602-2547

Fortune 1000 lockbox clients: 8
Fortune 1000 disbursement clients: 11
Fortune 1000 total clients: 16
Financial services clients: 8
Executive: Vickie Reynolds Akelman, senior vice president.
Contact: Robert Jaffe or William Seeman, vice presidents.
C.M. professionals: 16

National Westminster Bank USA's Corporate Cash Management Division offers retail and automated wholesale lockboxing on a selected basis. The bank has stand-alone lockbox processing facilities in Huntington, N.Y.

The bank uses the Chase Access system for its balance reporting. Terminal-initiated services not on the chart include intraday depository transfer activity reporting.

It has international lockboxing in London.

The consulting group uses the Phoenix-Hecht micro model for lockbox/disbursement studies.

Its account reconciliation system was developed by Disc System.

NBC Bank-San Antonio

430 Soledad, San Antonio, Texas 78205; (512) 229-2382

Fortune 1000 lockbox clients: 1
Financial services clients: 6
Executive: Edwin E. "Gene" Clarke Jr., vice president.
Contact: Karen R. Brown, assistant vice president.
C.M. professionals: 2
Representative clients: Diamond Shamrock, H.B. Zachry, Rogers Cablesystems, Target Stores.

NBC Bank-San Antonio's Corporate Cash Management Department uses National Data Corp.'s system for its balance reporting. Terminal-initiated services not on the chart include information/deposit reporting through NDC.

The bank's account reconciliation package was developed in-house; its treasury workstation by National Data Corp. Other services include automated accounting services through ADP.

NCNB National Bank

1 NCNB Plaza, T18-1, Charlotte, N.C. 28255; (704) 374-5698

Executive: H.D. "Buddy" LeTourneau, senior vice president.
Contact: Bob Grant and Austin Prit-

Georgia; Rubye Rollins, Florida.
C.M. professionals: 45

NCNB National Bank's Cash Management Division has stand-alone lockbox processing facilities in Tampa, Fla.

It uses the BankLink system for its balance reporting. Other terminal-initiated services include check inquiries.

The consulting group uses University Analytics models for its lockbox/disbursement studies. The group also offers treasury audits and consulting.

The bank's taxable assets under management as of April 30 were $7.2 billion.

Its account reconciliation system was developed by Disc Inc.; its treasury workstation, by ADS Associates. Other services include freight payment services.

The Northern Trust Bank

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

Fortune 1000 lockbox clients: 640
Fortune 1000 disbursement clients: 200
Fortune 1000 total clients: 675
Financial services clients: 114
Executive: Joseph M. Jarosz, senior vice president.
Contact: Maureen H. Keane, vice president.
C.M. professionals: 45

The Northern Trust Bank's Cash Management Department has overseas lockboxing in London.

The study group uses the UAI model for lockbox/disbursement studies.

Its account reconciliation package was developed in-house. Other services provided include personal computer-based software to receive lockbox receivable data; reconcile corporate charge accounts; initiate ACH transactions; initiate wire transfers; and initiate letters of credit.

Norwest Bank Billings

175 N. 27th St., P.O. Box 30058, Billings, Mont. 59117; (406) 657-3442

Fortune 1000 total clients: 5
Executive: Terri McMillan.
C.M. professionals: 2

Norwest Bank Billings' Cash Management Division's consulting group uses the University Analytics model for its lockbox/disbursement studies.

Its account reconciliation package was developed by Disc II.

Norwest Bank Des Moines

666 Walnut, Des Moines, Iowa 50309; (515) 245-3262

C.M. professionals: 2

Norwest Bank Des Moines' Cash Management Sales Department uses the NDC system for its balance reporting as well as an in-house system.

Norwest Bank Minneapolis

Eighth Street and Marquette Avenue, Minneapolis, Minn. 55479; (612) 372-8226

Executive: Scott Peterson, vice president-product manager; Rick Ferris, vice president-sales manager.
Contact: Messrs. Peterson or Ferris.
C.M. professionals: 30

Norwest Bank Minneapolis' Cash Management Division's consulting group has international lockboxing in London.

It uses the University Analytics model for its lockbox/disbursement studies.

Its account reconciliation system was developed by Disc II.

Norwest Bank Omaha

20th and Farnam Streets, Omaha, Neb. 68102; (402) 536-2001

Financial services clients: 6
Executive: Ed Ostransky, vice president.
C.M. professionals: 4

Norwest Bank Omaha's Cash Management Department's account reconciliation package was developed by Disc II.

Norwest Bank St. Paul

55 E. Fifth St., St. Paul, Minn. 55101; (612) 291-2236

Executive: Jane O'Connor, manager.
Contact: Ms. O'Connor.
C.M. professionals: 3

Norwest Bank St. Paul's Cash Management Division has stand-alone lockbox processing facilities in Minneapolis.

It has overseas lockbox collection in London.

The consulting group uses the University Analytics model for its lockbox/disbursement studies.

The account reconciliation package was developed by Disc II.

Norwest Bank South Dakota

P.O. Box 1028, Sioux Falls, S.D. 57117; (605) 339-7429

Financial services clients: 3
Executive: Donald S. Hooper, vice president and client executive.
Contact: Mr. Hooper.
C.M. professionals: 2

Norwest Bank South Dakota's Cash Management Division has overseas lockbox collection sites in London. Its account reconciliation package was developed by Disc II.

Other services offered include daily sweep/investment service and automated cross-capture at 37 statewide branches.

o

Old Kent Bank & Trust Co.

P.O. Box 100, Grand Rapids, Mich. 49501; (616) 774-5509

Executive: David W. Lubbers, vice president.
Contact: Larry A. Pinckney, assistant vice president.
C.M. professionals: 2

Old Kent Bank & Trust Co.'s Corporate Services Department's account reconciliation package was developed by Disc Inc.

Other services offered include corporate financial forecasting model.

p

Philadelphia National Bank

Broad and Chestnut Streets, Philadelphia, Pa. 19101; (215) 629-5628

Fortune 1000 lockbox clients: 104
Fortune 1000 disbursement clients: 60
Fortune 1000 total clients: 200
Financial services clients: 73
Executive: Percival B. Moser III, senior vice president.
Contact: Mr. Moser.
C.M. professionals: 50

Philadelphia National Bank's Corporate and Institutional Products and Services Department is a member of the Imagenet lockbox network.

The bank uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include ACH and international payments.

The bank has overseas lockboxing sites in Europe and Asia.

The consulting group uses the UAI model for lockbox/disbursement studies. The group also offers balance management and international collec-

Its treasury workstation was developed by MicroCTS. Other services include worldwide trade services.

Pittsburgh National (Affiliate of PNC Financial Corp.)

Fifth Avenue and Wood Street, Pittsburgh, Pa. 15265; (412) 355-2858

Fortune 1000 lockbox clients: 200
Fortune 1000 disbursement clients: 80
Fortune 1000 total clients: 300
Financial services clients: 20
Executive: Robert D. Edwards, vice president and manager-cash management department.
Contact: Mr. Edwards.
C.M. professionals: 35

Pittsburgh National's Cash Management Department is a member of the AccelaNet lockbox network. The bank has stand-alone lockbox processing facilities in Pittsburgh, Dallas, Houston and Philadelphia.

The bank uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include ACH and CTP.

The consulting group uses the University Analytics model for lockbox/disbursement studies.

The group also offers treasury system analysis.

Pittsburgh National had $100 million in taxable assets under management as of April 30.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by ADS.

Provident National Bank

Broad and Chestnut Streets, Philadelphia, Pa. 19101; (215) 585-6614

Executive: Charles Huffman, vice president and manager-cash management department.
C.M. professionals: 10

The Corporate Services Cash Management Department is a member of the PNC Financial AccelaNet lockboxing network.

The bank uses the NDC system for its balance reporting.

The consulting group uses the University Analytics-Duke IV model for lockbox/disbursement studies.

The bank uses the Disc system for its account reconciliation.

ADS developed the treasury workstation.

r

Rainier National Bank

600 University, P.O. Box 3966, Seattle, Wash. 98124; (206) 621-4326

Fortune 1000 lockbox clients: 25
Fortune 1000 disbursement clients: 25
Fortune 1000 total clients: 50
Financial services clients: 10
Executive: James B. Pellegrino, vice president and manager.
Contact: Mr. Pellegrino.
C.M. professionals: 9
Representative clients: Paccar, Weisfield's.

Rainier National Bank's Cash Management Consulting Group is a member of the US$NET lockboxing network, a service provider only. The bank has stand-alone processing facilities in Portland, Ore., and Anchorage, Alaska.

It uses the ADP system for its balance reporting.

The bank has overseas lockbox sites in Asia.

The consulting group uses the CO-Banks model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by MicroCTS (Capital

RepublicBank Dallas/Houston

P.O. Box 225961, Dallas, Texas 75265; (214) 922-6861

Executive: Paul A. Stotts, senior vice president.
Contact: Shirley J. Gilmer, vice president.
The Corporate Financial Services Departments of RepublicBank Dallas and RepublicBank Houston are members of the Imagenet lockbox network, with stand-alone lockbox processing facilities in Houston.
The banks use the ADP system for balance reporting.
Their account reconciliation packages were developed by Disc Inc.; the treasury workstations, by ADS.

The Riggs National Bank

P.O. Box 1912, Washington, D.C. 20074; (202) 835-6000

Executive: William H. Kitt, senior vice president.
Contact: Mr. Kitt.
C.M. professionals: 10
The Cash Management Division of Riggs National Bank uses the ADP system for its balance reporting.
Its account reconciliation package was developed by Disc Inc.

S

Seattle-First National Bank

P.O. Box 3586, Seattle, Wash. 98124; (206) 442-3286

Executive: David L. Boyles, senior vice president and manager.
Contact: Joan Enticknap, vice president-marketing and customer services.
C.M. professionals: 30
Seattle-First National Bank's Financial Technologies Division uses the NDC system for its balance reporting.
Its account reconciliation package was developed by Disc Inc.; its treasury workstation was developed in-house.

Security Pacific National Bank

333 S. Hope St., Los Angeles, Calif. 90071; (213) 613-6211

Fortune 1000 lockbox clients: 300
Fortune 1000 disbursement clients: 600
Fortune 1000 total clients: 700
Financial services clients: 200
Executive: Terry L. Feder, senior vice president.
Contact: Charles Whitney, vice president.
Security Pacific National Bank's Corporate Cash Management Department is a member of the Imagenet lockbox network. It has stand-alone lockbox processing facilities in San Francisco and San Diego.
The bank uses the Payment Network for disbursement services.
It has overseas lockbox sites in London, Toronto and Frankfurt.
Its consulting group offers bank analysis.
The bank's account reconciliation package was developed in-house; its treasury workstation by ICM. Other services include electronic information and financial market information.

Shawmut Bank of Boston

1 Federal St., Boston, Mass. 02211; (617) 292-2020

Executive: Peter G. Galligan, vice president.
C.M. professionals: 17
Shawmut's Corporate Services Group offers terminal-initiated bill payment and uses the Phoenix-Hecht mainframe and micro models for its lockbox/disbursement studies.
reconciliation; IBM Treasury Manager developed the treasury workstation.
Other services include government check intercept, federal tax payments, automatic investment, general accounting applications and payroll.

Society National Bank

800 Superior Ave. N.E., Cleveland, Ohio 44114; (216) 344-3000

Fortune 1000 lockbox clients: 25
Fortune 1000 disbursement clients: 15
Fortune 1000 total clients: 50
Financial services clients: 10
Executive: Bruce G. Keenen, vice president and manager.
Contact: Mr. Keenen.
C.M. professionals: 7
Society National Bank's Corporate Cash Management Department uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include depository transfer check/EFT debits.
The consulting group uses the Duke 4.0 model for lockbox/disbursement studies.

Southeast Bank

1 Southeast Financial Center, Miami, Fla. 33131; (305) 375-6675

Fortune 1000 lockbox clients: 46
Fortune 1000 disbursement clients: 61
Fortune 1000 total clients: 225
Executive: Robert Schoen, senior vice president.
Contact: Patrick McElhaney, assistant vice president.
C.M. professionals: 25
Southeast Bank's Corporate Services Department has stand-alone lockbox processing facilities in Tampa, Fla.
It uses the BankLink system for its balance reporting. Terminal-initiated services not on the chart include ACH/DTC.
Its account reconciliation package was developed by Disc Inc.; its treasury workstation by ICM/BankLink.

International advisers: Aug. 4.

Sovran Bank

P.O. Box 27025, Richmond, Va. 23261; (804) 788-2424

Executive: Michael W. Paulette, senior vice president.
Contacts: Gloria M. Daout, vice president; Jeffrey W. Lovejoy, vice president.
C.M. professionals: 25
Sovran Bank's Cash Management Department has stand-alone lockbox processing facilities in Richmond, Norfolk, Roanoke and Northern Virginia.
For balance reporting, the bank uses NDC and BankLink.
The consulting group uses the Duke model for lockbox/disbursement studies.

Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by Future Technologies Inc.

Sovran Bank/Maryland

6610 Rockledge Drive, Bethesda, Md. 20817; (301) 493-2861

Executive: Janice L. Claudio, vice president.
Contact: Karen Thor, assistant vice president.
C.M. professionals: 13
Sovran Bank/Maryland's Cash Management Department uses the ADP system for its balance reporting.
The consulting group uses the Duke model for its lockbox/disbursement studies.
The account reconciliation system was developed by Disc.

State Street Bank & Trust

225 Franklin St., Boston, Mass. 02101; (617) 654-3680

Fortune 1000 lockbox clients: 20
Fortune 1000 disbursement clients: 35
Fortune 1000 total clients: 100
Financial services clients: 20
Executive: W.H. Kieffer III, vice president.
Contact: Randal L. McGathey, vice president, (617) 654-3663.
C.M. professionals: 15
State Street Bank & Trust Co.'s Corporate Services Department uses NDC-Cash Exchange for its balance reporting.
The consulting group uses the UAI/Phoenix-Hecht models for its lockbox/disbursement studies.
The account reconciliation package was developed by Disc Inc.

Sun Banks Inc.

P.O. Box 3833, Orlando, Fla. 32897; (305) 237-4015

Executive: Robert W. Pledger, senior vice president.
Contact: Letitia B. Gavin, vice president.
C.M. professionals: 16
Sun Bank Inc.'s Business Services Department has stand-alone lockbox processing facilities in Miami and Orlando, Fla.
The bank uses the NDC-CMX system for its balance reporting.
The consulting group uses the Phoenix-Hecht/University Analytics models for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by Capital Systems Group Inc.

t

Texas American Bancshares

P.O. Box 2050, Fort Worth, Texas 76113; (817) 338-8656

Fortune 1000 lockbox clients: 25
Fortune 1000 disbursement clients: 15
Fortune 1000 total clients: 75
Financial services clients: 20
Executive: Grant Ferguson, vice president-corporate customer services manager.
Contact: Mr. Ferguson.
C.M. professionals: 6
Representative clients: MCI Telecommunications, Texas Electric Service, Skaggs, Curtis Mathes.
Texas American Bancshares' Corporate Customer Services has stand-alone lockbox processing facilities in Houston.
The bank uses the National Data Corp. system for its balance reporting. Terminal-initiated services not on the chart include cash concentration.
The consulting group uses the Duke model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc; its treasury workstation, by Arthur Young.
Other services offered include the ability to spread investments throughout the 34 banks of Texas American Bancshares to have a larger portion of deposits covered by the FDIC.

Texas Commerce Bank — Houston

P.O. Box 2558, Houston, Texas 77252-8081; (713) 236-6320

Executive: Jerry N. Boynton, senior vice president.
Contact: John E. McKennie, vice president.
C.M. professionals: 23
Texas Commerce Bank — Houston's Corporate Management Department is a member of the AccelaNet lockboxing network.
It uses BankLink for its balance reporting. Terminal-initiated services not on the chart include ACH and DTC.
The bank had $7 billion of taxable assets under management as of April 30.
Its account reconciliation package was developed by Disc Comprehensive; its treasury workstation, by Capital Systems Group. Other services offered include check safekeeping and commercial deposit services.

Third National Bank in Nashville

201 Fourth Ave. N., Nashville, Tenn. 37244; (615) 748-4038

Fortune 1000 lockbox clients: 10
Fortune 1000 disbursement clients: 14
Fortune 1000 total clients: 121
Financial services clients: 29
Executive: James A. Robertson, senior vice president-corporate services.
Contact: Jeffrey W. Parker, assistant vice president.
C.M. professionals: 15
Representative clients: Northern Telecom, Service Merchandise, Hospital Corp. of America, Vanderbilt University.
Third National Bank in Nashville's Corporate Services Department uses the BankLink system for its balance reporting. Its terminal-initiated letters of credit are not part of BankLink.
The consulting group uses University Analytics' model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Comprehensive; its treasury workstation, by BankLink. Other services offered include data transmission and consolidation.

Toledo Trust Co.

3 Seagate, Toledo, Ohio 43603; (419) 259-8556

Fortune 1000 disbursement clients: 1
Fortune 1000 total clients: 1
Financial services clients: 4
Executive: Marylou Zaloudek, vice president.
Contact: Harriet Clemens, corporate services representative.
C.M. professionals: 9

Trust Company Bank

P.O. Box 4418, Atlanta, Ga. 30302; (404) 588-7115

Financial services clients: 9
Executive: Ward H. Gailey, group vice president.
Contact: Mr. Gailey.
C.M. professionals: 9
Trust Company Bank's Corporate Services Department uses the National Data Corp. system for its balance reporting. Terminal-initiated services not on the chart include concentration service.
The consulting group uses the UAI model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by IBM. Other services include concentration service and data transmission.

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U

Union Bank

445 S. Figueroa St., Los Angeles, Calif. 90071; (213) 236-5683

Executive: Ronald B. Watkins.
C.M. professionals: 43
Union Bank's Cash Management Consulting Department uses the Phoenix-Hecht model for lockbox/disbursement studies.
Its account reconciliation package was developed in-house; its treasury workstation, by ADS.

United Bank of Denver

1700 Broadway, Denver, Colo. 80274; (303) 863-6183

Fortune 1000 lockbox clients: 100
Fortune 1000 disbursement clients: 200
Fortune 1000 total clients: 300
Financial services clients: 100
Executive: Peter E. Hosokawa, senior vice president.
Contact: Mr. Hosokawa.
C.M. professionals: 17
United Bank of Denver's Corporate Business Development/Cash Management Department is a member of the US$NET lockbox network.
The bank uses the NDC system for its balance reporting. Terminal-initiated services not on the chart include research inquiries.
The bank's account reconciliation package was developed by Disc Inc.; its treasury workstation, by Wells Fargo Bar

United ..rsey Bank

25 E. Salem St., Hackensack, N.J. 07602; (201) 646-5334

Fortune 1000 lockbox clients: 25
Fortune 1000 disbursement clients: 5
Fortune 1000 total clients: 50
Financial services clients: 10
Executive: Michael J. Dunn, vice president-corporate services.
Contact: Mr. Dunn.
C.M. professionals: 4
United Jersey Bank's Corporate Services Department has stand-alone lockbox processing facilities in Cherry Hill, N.J.
The bank uses the Chase Access system for its balance reporting. Terminal-initiated services not on the chart include cash concentration.
The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc.

United Missouri Bank of Kansas City

10th and Grand, Kansas City, Mo. 64141; (816) 556-7000

Executive: Gary F. Foltz, senior vice president.
Contact: Michael Porter, vice president.
C.M. professionals: 6
United Missouri Bank of Kansas City's Corporate Services Department has stand-alone lockbox processing facilities in St. Louis.
The bank uses the ADP system for its balance reporting.
For lockbox/disbursement studies, the consulting group uses its own model and the Phoenix-Hecht model. The group also offers consulting services.
As of April 30, the bank had $901 million in taxable assets under management.
Its account reconciliation package was developed by Disc Inc.; its treasury workstation, by ADP and in-house. Other services offered include ASTs, ACH concentration, corporate draw, DTCs, freight payment and PACs.

A look at how pension funds are using venture capital: Nov. 24.

United States National Bank of Oregon

P.O. Box 4412, Portland, Ore. 97208; (503) 225-6439

Fortune 1000 lockbox clients: 62
Fortune 1000 disbursement clients: 28
Fortune 1000 total clients: 73
Financial services clients: 580
Executive: Richard M. Carey, vice president and manager-cash management.
C.M. professionals: 12
Representative clients: AT&T, K mart, Crown Zellerbach, Jantzen.
United States National Bank of Oregon's Cash Management Services Department is a member of the First National Bank of Chicago's lockboxing network. The bank has stand-alone lockbox processing facilities at FNB Chicago sites.
The bank uses the ADP system for its balance reporting. Terminal-initiated services not on the chart include MM investments and ACH transfers.
The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.
Its taxable assets under management as of April 30 were $130 million.
The bank's account reconciliation package was developed by Disc Inc.

United Virginia Bank

919 E. Main St., Richmond, Va. 23219; (804) 782-7553

Fortune 1000 lockbox clients: 12
Fortune 1000 disbursement clients: 14
Fortune 1000 total clients: 28
Financial services clients: 67
Executive: Stephen E. Arnold, senior vice president.
Contact: Richard F. Smith, vice president.
C.M. professionals: 38
United Virginia Bank's Corporate Services Department uses the NDC system for its balance reporting.
The consulting group uses the Phoenix-Hecht model for lockbox/disbursement studies.
Its account reconciliation package was developed by Disc Inc. — System III; its treasury workstation, by MicroCTS and NDC-Treasury Manager.

W

Wells Fargo Bank

464 California St., MAC 0101-095, San Francisco, Calif. 94104; (415) 396-7777

Executive: David Kurrasch, vice president and manager-sales.
C.M. professionals: 65
Wells Fargo Bank's Cash Management Division — Information Services Group is a member of the US$NET lockboxing network.
The bank's treasury workstation was developed in-house.

Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-8082

Executive: Marion S. Marine, banking officer and manager-corporate banking services.
Contact: Ms. Marine.
Wilmington Trust Co.'s Corporate Banking Services' treasury workstation was developed in-house.

Pension & Investment Age's annual profile of the nation's leading investment management consulting firms is scheduled to appear Nov. 10. Also in that issue will be the third quarter Pensions & Investments' Performance Evaluation Report results.

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SOVRAN BANK
Cash Management Services

U.S. associations

California

Peninsula Cash Management Association

Corporate membership: 50
Meetings: Second Wednesdays, except July and January.
Membership fee: $150
Contact: Lynn Cox, 401 Broadway MSI-38, Redwood City, Calif. 94063-3199; (415) 367-2919.

Cash Management Association of San Diego

Corporate membership: 56
Corporate members: Aerojet General, PSA, Price Co., Copley Press.
Meetings: Bimonthly.
Membership fee: $145
Contact: David Wilken, P.O. Box 1831, San Diego, Calif., 92112; (619) 696-4049.

Cash Management Association of Southern California

Corporate membership: 90
Meetings: Nine meetings a year, plus an annual exposition.
Membership fee: $75
Contact: Ellen M. Higgins, Cash Management-10th Floor, Wells Fargo Bank, 444 S. Flower St., Los Angeles, Calif. 90071; (213) 253-6279.

Colorado

Colorado Cash Management Association

Corporate membership: 125
Meetings: Monthly
Membership fee: $40
Contact: H.R. Sessions, Public Service Co. of Colorado, P.O. Box 840, Room 850, Denver, Colo. 80201-0840; (303) 571-7753.

Connecticut

Central Connecticut Cash Management Association

Corporate membership: 46
Meetings: Second Tuesdays, except July, August and December.
Membership fee: $110 (includes NCCMA)
Contact: Dale P. Sporck, 1120 Harvey Lane, Suffield, Conn. 06078; (203) 623-1681.

Florida

National Corporate Cash Management Association — South Florida Chapter

Corporate membership: 36
Meetings: Third Thursdays.
Membership fee: $100 corporate; $125 associate.
Contact: John H. Fischer, P.O. Box 113211, Miami, Fla., 33111; (305) 255-8308.

Georgia

Atlanta Treasury Management Association

Corporate membership: 71
Corporate members: Georgia Pacific, Delta, Coca-Cola, Scientific Atlanta.
Meetings: Monthly except July, August and December.
Membership fee: $185
Contact: Charles Smith, 3445 Peachtree Road N.E., Atlanta, Ga. 30326; (404) 239-2963.

Illinois

Treasury Management Association of Chicago

Corporate membership: 72
Meetings: Fourth Thursdays, except July and August; joint meeting November/December.
Membership fee: $150 regional
Contact: William H. Lefebve, Square D Co., 1415 S. Roselle Road, Chicago, Ill. 60067; (312) 397-2600, ext. 305.

Louisiana

New Orleans Cash Management Association

Corporate membership: 22
Meetings: Second Tuesdays, except December.
Membership fee: $125
Contact: Arlene F. Perkins, Middle South Utilities Inc., P.O. Box 61000, New Orleans, La. 70161; (504) 569-4827.

Minnesota

Twin Cities Cash Management Association

Corporate membership: 86
Corporate members: American Hoist & Derrick, Cargill, Control Data, Dayton Hudson.
Meetings: Second Thursdays, September through May.
Membership fee: $50
Contact: Thomas J. Simon, P.O. Box SDS 12-0030, Minneapolis, Minn. 55486; (612) 641-6483.

Missouri

St. Louis Cash Management Association

Corporate membership: 56
Corporate members: Ralston Purina, Anheuser-Busch, McDonnell Douglas, Monsanto.
Meetings: Third Thursdays.
Membership fee: $30
Contact: John Bruenger, ConAgra Frozen Foods, P.O. Box 70, Ballwin, Mo. 63022-0070; (314) 957-4019.

New Jersey

Northern New Jersey Association of Cash Management

Corporate membership: 65
Corporate members: New Jersey Bell, Super Markets General, C.R. Bard, Dow Jones.
Meetings: Second Wednesdays, September through June.
Membership fee: $175
Contact: Don Aquila, 920 Route 202, Raritan, N.J. 08869; (201) 685-1600.

New York

Corporate Cash Managers Association of New York

Corporate membership: 118
Corporate members: AT&T, CBS, Exxon, Nabisco Brands.
Meetings: Third Wednesdays.
Membership fee: $275
Contact: Cheryl B. Lapow, Reliance Group Holdings, 55 E. 52nd St., New York, N.Y. 10055; (212) 909-1193.

PIPER second quarter: Aug. 18.

Ohio

Central Ohio Cash Management Association

Corporate membership: 39
Corporate members: Nationwide Insurance, Wendy's, Worthington Industries, OCLC.
Meetings: Third Wednesdays, September through May.
Membership fee: $25
Contact: Tom Luffy, Columbia Gas of Ohio, 200 Civic Center Drive, Columbus, Ohio, 43216; (614) 460-4279.

Cincinnati Cash Management Association

Corporate membership: 45
Corporate members: Procter & Gamble, Kroger, Mead, NCR.
Meetings: Third Wednesdays, February through May, September through November.
Membership fee: $150 (includes NCCMA)
Contact: Lawrence L. Buechel, Palm Beach Inc., P.O. Box 1519, Cincinnati, Ohio 45201; (513) 241-4260.

Oklahoma

Tulsa Cash Management Association

Corporate membership: 62
Corporate members: CITGO Petroleum, MAPCO, University of Tulsa, Reading & Bates.
Meetings: Third Tuesdays
Membership fee: $75
Contact: Dinah Swinehart, P.O. Box 94465, Tulsa, Okla. 74194; (918) 586-5231.

Oregon

Portland Cash Managers Association

Corporate membership: 95
Corporate members: Pacificorp, Tektronix, Nike, Louisiana Pacific.
Meetings: Third Tuesdays in January, March through May, September through November.
Membership fee: $75
Contact: Don Hehman, P.H.A., P.O. Box 1020, Portland, Ore. 97207; (503) 221-6760.

Pennsylvania

Pittsburgh Cash Management Association

Corporate membership: 41
Meetings: Third Thursday, bimonthly.
Membership fee: $35
Contact: Larry D. McMillen, P.O. Box 2215, Pittsburgh, Pa. 15230; (412) 565-7124.

Tennessee

Financial Managers Association of Nashville

Corporate membership: 85
Meetings: Second Thursdays.
Membership fee: $120
Contact: Betty K. Parker, Drawer T-404, Nashville, Tenn. 37244; (615) 322-2451.

Texas

San Antonio Cash Management Association

Corporate membership: 38
Meetings: Six times a year.
Membership fee: $100
Contact: Ted McFadin, P.O. Box 1272, San Antonio, Texas 78295; (512) 227-3211.

Utah

Utah Corporate Cash Management Association

Corporate membership: 28
Corporate members: Browning Co., Brigham Young University, Mountain Fuel Supply, Utah Power & Light Co.
Meetings: Monthly.
Membership fee: $25
Contact: Martin H. Craven, P.O. Box 899, Room 315, Salt Lake City, Utah 84010; (801) 535-4005.

Virginia

Commonwealth Cash Management Association

Corporate membership: 44
Meetings: Monthly
Membership fee: $125
Contact: James Dietrick, Reynolds Metal Co., P.O. Box 27003, Richmond, Va. 23261; (804) 281-2679.

Wisconsin

Wisconsin Cash Management Association

Corporate membership: 30
Meetings: Third Mondays, September through June.
Membership fee: $120
Contact: Bill Wolters, Manpower Inc., P.O. Box 2053, Glendale, Wis. 53217; (414) 961-1000, ext. 248.

National/regional

Carolinas Cash Management Association

Corporate membership: 74
Corporate members: Maxway, First Wachovia Corp., CP&L, ITT.
Meetings: Monthly September through May, except December and February.
Membership fee: $200
Contact: Sharon L. Ferrell, P.O. Box 2010, Sanford, N.C. 27330; (919) 776-7611.

Electronic Funds Transfer Association

1726 M St. N.W., Washington, D.C. 20015; (202) 659-2100

Services offered: To act as a forum for companies involved in the use and development of electronic funds transfer, which includes automated teller machines, point-of-sale terminals and videotext services.
Clients: 250
Contact: James Callan, senior director.

National Corporate Cash Managers Association

Corporate membership: 2,700
Meetings: Annually in November.
Membership fee: $75.
Contact: Raymond P. Ruzak, executive director, NCCMA, P.O. Box 7001, New Town, Conn. 06470; (203) 426-3007.

Cash Management Association of New England

Corporate membership: 173
Corporate members: Hill's Department Stores, Digital Equipment, Gillette.
Meetings: Eight times a year.
Membership fee: $75
Contact: Keith F. Renaldi, P.O. Box 807, Lynnfield, Mass. 01940; (617) 821-1000, ext. 183.

Service providers

Arthur Andersen & Co.

33 W. Monroe St., Chicago, Ill. 60603; (312) 580-0033

Services offered: Systems development includes planning, design and installation of mainframe, mini- and microcomputers. Also hardware, software and cash management service selection studies, international cash management systems and operations improvement studies.
Clients: 300
Contact: James S. Marpe, partner.

Bank Valuation Inc.

96 Bourndale Road S., Manhasset, N.Y. 11030; (516) 627-7470

Services offered: Analysis of the largest 150 banks in the United States from a depositor's perspective. The banks are ranked each quarter according to their safety.
The model weights liquidity, 50%; credit risk, 30%; profitability, 10%; interest-rate match, 5%; and capital adequacy, 5%.
Clients: 60
Representative clients: Transamerica, Benham Capital, Drexel Burnham and American Petrofina.
Contact: Neill Reilly, managing director.

Banxquote Online

Division of Masterfund Inc., 575 Madison Ave., New York, N.Y. 10022; (212) 605-0337

Services offered: On-line information or investment advisory services on high-yield, federally insured CDs nationwide. More than 500 depository institutions are included in the data base.
Clients: 300
Representative clients: Metropolitan Life, Wall Street Journal, Dean Witter Reynolds, Reuters.
Contact: Norberto Mehl, president.

Brockden Associates Inc.

P.O. Box 67, Mendham, N.J. 07945; (201) 543-9504

Services offered: Treasury systems; cash management studies, reviews and audits; new product development; domestic and international studies; and microcomputer and mainframe software.
Clients: 20.
Contact: John Wilson, president.

Cash Management Institute

P.O. Box 540, 360 Woodland St., Holliston, Mass. 01746; (800) 343-5413 or (617) 429-5930

Services offered: Cash management conferences: CMI National Forum, spring; CMI Industry-Specific Group Forums, fall. Publish The CASH MANAGER.
Contact: Kim MacKenzie Todd, assistant director.

The Donoghue Organization

P.O. Box 540, 360 Woodland St., Holliston, Mass. 01746; (800) 343-5413 or (617) 429-5930

Services offered: Donoghue's Money Fund Report, a weekly and monthly newsletter; available via electronic delivery.
Contact: Ken Bohlin, vice president.

First Data Resources Inc.

10825 Farnam Drive C-44, Omaha, Neb. 68154; (402) 399-7490

Services offered: Concentration and disbursement services, management information reporting, electronic remittance services, lockbox reporting and single bank balance reporting.
Contact: John Albin, marketing manager-cash management department.

National Data Corp.

1 National Data Plaza, Corporate Square, Atlanta, Ga. 30329; (404) 329-8546

Services offered: Deposit/information reporting (cash concentration), multibank balance reporting, money transfer, treasury workstations.
Representative clients: Fotomat, Sun Bank, Citizens & Southern National Bank, Grossman's.
Contact: F. Rod Austin, vice president-U.S. sales.

Olson Research

6305 Ivy Lane, Greenbelt, Md. 20770; (301) 982-0400

Services offered: Analysis of bank and bank holding companies' risk and return based on a review of more than 125 performance benchmarks. OlsonScore reports provide alphabetical ratings, numerical score, peer group rankings and historical and projected financial data. Reports are updated quarterly in hard copy or diskette format.
Representative clients: Ameritech, Allstate Insurance, Norwest Corp., Kroger Co.
Contact: Mary Heath, product manager.

Peat, Marwick, Mitchell & Co.

345 Park Ave., New York, N.Y. 10154; (212) 758-9700

Services offered: Controls reviews, cash management and banking diagnostic reviews, workstation studies, international treasury services, forecasting and organizational reviews.
Contact: Craig Leiby, senior consultant.

M. Sternburg & Co. Inc.

131 Washington St., Norwalk, Conn. 06854; (203) 852-7200

Services offered: Eurodollar brokerage services.
Clients: 85
Contact: Peter B. Cozens.

Structured Asset Management

3315 Cameron Drive, Henderson, N.C. 27536; (919) 492-5154

Services offered: Accounts payable and control; cash/treasury management techniques; credit and collection administration; employee benefit design and administration; liquidity management; receivable analysis and control; working control management.
Contact: George B. Rush, consultant.

Treasury Strategies Inc.

180 N. LaSalle St., Chicago, Ill. 60601; (312) 443-0840

Services offered: Consulting to banks, corporations and financial institutions in the areas of cash management, bank service pricing, high volume remittance processing and ACH applications.
Contact: Anthony J. Carfang, principal.

Valutech

2322 S. Pullman St., Santa Ana, Calif. 92705; (714) 250-4488

Services offered: Systems integrator for cash management applications. Technical assistance extends across feasibility and cost justification, system design, installation planning and conversion support, benefit tracking and system maintenance. Applications include domestic and international disbursement and cash concentration systems employing all paper and electronic settlement options. System features include automation of manual check production, profit control over the complete payment time line, local and controlled disbursement worldwide, payroll, taxes, interface to existing financial application software, account reconciliation, cash forecasting, automated backup and multilayered security capabilities.
Contact: Eric Thomson, president.

VERIBANC Inc.

P.O. Box 2963, Woburn, Mass. 01888; (617) 245-8370

Services offered: Financial reports on federally insured banks, savings and loans, holding companies, mutual savings banks and credit unions. Also, lists of institutions that meet various criteria and can be client-selected. The firm offers both 24-hour priority and call-back services.
Clients: 5,000
Contact: Kitty T. Heller, president.

White Papers Inc.

95 Gordonhurst Ave., Upper Montclair, N.J. 07043; (201) 746-5456

Services offered: Electronic payment strategies development, preparation of private "white papers" on payment issues for corporations and financial servicers, electronic payments conferences, and in-house seminars.
Contact: George C. White, president.

Wismer Associates Inc.

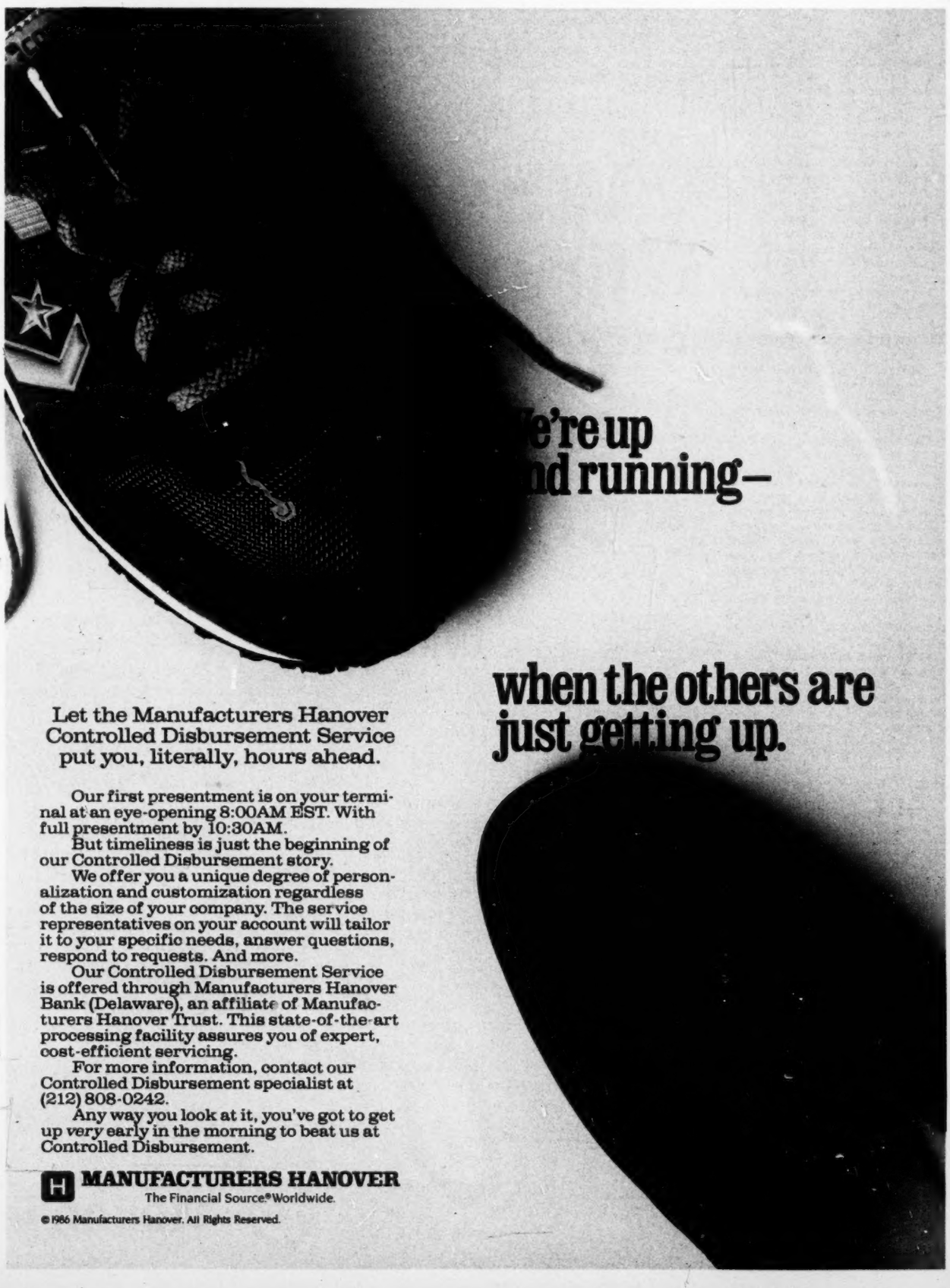
22134 Sherman Way, Canoga Park, Calif. 91303; (818) 884-5515

Services offered: CASHMAX, a portfolio management and investment accounting computer system for effective short-term cash and investment management. Includes portfolio management reporting, performance measurement and analysis, cash flow forecasting and tracking, cash management strategy, investment trading selection and analysis, debt management, fund accounting modules. Position reports, income projections, risk monitoring, investment and borrowing simulations, fixed-income swaps.

Also offered is PENSIONMAX, a portfolio management and investment accounting computer system for securities accounting and reporting for bonds, stocks, options, mortgages, Treasuries, agencies, collateral-backed and money market securities. The system also features trade or settlement date, accruals and amortizations/accretions, when-issued trades, specific lot and average cost, income projection, swap analysis and risk monitoring.
Contact: Bruce E. Vollert, vice president-marketing.

XRT Inc.

989 Old Eagle School Road, Wayne, Pa. 19083; (215) 254-0300



Services offered: A comprehensive treasury management system including cash management (balance reporting, wire transfer, cash positioning and bank relations), commercial paper issuing, long-term debt and investment management.
Clients: 11
Representative clients: American Express Credit, Associates Corporation of North America, General Motors Acceptance, IBM Credit.
Contact: Anthony Potts, vice president-financial systems.

Managers

AMEV Asset Management

1 World Trade Center, Suite 5001, New York, N.Y. 10048; (212) 775-9100

Short-term funds: $135 million
Clients: 8
Representative clients: Time Insurance, Western Life Insurance, American Security Insurance.
Investment style: AMEV Asset Management Inc. seeks to maximize total return guided by a client's liquidity and risk preferences as well as tax considerations.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, Yankee CDs, Euro CDs, Euro time deposits, repos, money market funds, ARPS, floating-rate notes.
Client contact: Rahmi Sayder, vice president.

Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005; (212) 493-8330

Short-term funds: $655 million
Clients: 17
Representative clients: AT&T, Litton, NYSE.
Investment style: Brown Brothers Harriman & Co. seeks to maximize total return through active trading and constant evaluation of factors affecting rates in various sectors of the market. Techniques used include varying exposure to market risk, swapping securities, arbitrage, leverage and monitoring of Fed activity and interest rate-related economic events. Implicit in this process is discretionary authority, within guidelines, on the portfolio.
Instruments purchased: CDs, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, money market funds, ARPS, money market preferred stocks, government agencies (FFCB, FNMA, FHLB, GNMA), corporate notes (medium term).
Fees: 0.15% per annum on first $50 million; 0.125% on next $100 million; 0.10% on excess of $150 million. The annual minimum is $50,000, including custody.
Client contact: Frank J. Keeler, manager.

Capitoline Investment Services Inc.

919 E. Main St., Richmond, Va. 23219; (804) 782-7251

Short-term funds: $545 million
Clients: 91
Representative clients: Alabama-Tennessee Natural Gas, Chesapeake Corp., Farm Fresh Inc.
Investment style: Capitoline pays primary attention to analysis of the yield curve and probable movements of short-term rates, actively positioning maturities to best take advantage of such movements. Particular attention is also paid to special situations in the marketplace resulting from either imbalances in supply and demand or other special circumstances that give rise to attractive short-term yield opportunities.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, money market funds, stock options, stock index futures, stocks, ARPS, money market preferred stocks, government agencies (FNMA, FHLB, FICB, FFC, FLB, GNMA), tax-exempt commercial paper, tax-exempt notes, corporate bonds, tax-exempt municipal bonds.
Fees: 0.375% on first $10 million; 0.250% on next $10 million; negotiable thereafter.
Client contact: William E. Heisler, vice president-director of marketing.

Chase Lincoln First Bank

1 Lincoln First Square, Rochester, N.Y. 14643; (716) 258-5220

Short-term funds: $600 million.
Clients: 75
Investment style: Chase Lincoln puts primary emphasis on safety with return maximized through maturity structure and active trading in conjunction with the bank's interest rate forecast. Credit and security research are its strong points.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, Euro CDs, repos, money market funds, ARPS, money market preferred stocks, all government agencies, tax-exempt commercial paper, tax-exempt notes.
Fees: In the 25- to 30-basis-point range.
Client contact: Kathleen Dennis, vice president and manager-short term asset management group.

Chemical Bank

277 Park Ave., New York, N.Y. 10172; (212) 310-4504

Short-term funds: $2 billion.
Clients: 17
Investment style: Chemical is an active manager, anticipating interest rate changes. Portfolio strategy emphasizes safety, liquidity and yield within client parameters.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, tax-exempt commercial paper, tax-exempt notes.
Client contact: Matthew R. Cody, vice president-capital markets.

Drexel Management Corp.

2 Broadway, New York, N.Y. 10004; (212) 482-1390

Short-term funds: $300 million.
Clients: 16
Investment style: Drexel custom tailors each portfolio to a client's specific parameters for risk, liquidity and taxes. All portfolios are actively managed to maximum yield. Analysis of economic variables and anticipation of interest rate trends are key determinants in structuring strategies.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, money market funds, money market preferred stocks, all government agencies, tax-exempt commercial paper, tax-exempt notes, increasing rate notes.
Fees: 0.25% to 0.15%.
Client contact: Michael J. Napoli Jr., vice president.

First Boston Asset Management Corp.

12 E. 49th St., New York, N.Y. 10017; (212) 909-4525

Short-term funds: $690 million
Clients: 4
Investment style: First Boston optimizes portfolios for total return.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, money market funds, money market preferred stocks, all government agencies, tax-exempt notes.
Client contact: Michael F. Holland, president.

Public pension funds — the state of the union: Oct. 13.

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Mellon Bank

Member FDIC

Fischer, Francis, Trees & Watts

717 Fifth Ave., New York, N.Y. 10022; (212) 350-8050

Short-term funds: $1.2 billion.
Clients: 7
Investment style: Fischer, Francis, Trees & Watts shifts maturity and issuer sector composition of high-grade securities based on the firm's assessment of the major factors affecting the fixed-income markets, yield curve analysis and its proprietary optimization model.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repurchase and resale agreements, money market funds, interest rate options, interest rate futures, options on futures, money market preferred stocks, government agencies (FHLB, FNMA, GNMA, World Bank, SLMA, Farm Credit), floating-rate CDs and notes, security lending.
Fees: 0.20% on first $100 million; 0.15% on remaining.
Client contact: Cecilia Murphy, vice president.

Gateway Investment Advisers Inc.

Suite 220, 400 Technecenter Drive, Milford, Ohio 45150; (513) 248-2700

Short-term funds: $115 million
Clients: 27
Representative clients: Campbell Soup, Central Illinois Public Service, Peak Health Care.
Investment style: Gateway's strategy involves the purchase of higher-yielding common stocks prior to ex-dividend date. Dividends qualify for 85% deduction. Stocks are hedged with options and index options to reduce risk.
Instruments purchased: CDs, T-bills, money market funds, stock options, stocks.
Fees: 1.2% per annum.
Client contact: Peter W. Thayer, executive vice president.

J.J. Grady Co. Inc.

2604 Elmwood Ave., Suite 138, Rochester, N.Y. 14618-2213; (716) 586-2731

Short-term funds: $5 million
Clients: 5
Investment style: J.J. Grady analyzes financial statements and existing invoicing collection and disbursement process; determines short- and medium-term cash requirements; modifies existing processes to optimize cash retention and/or minimize debt; and establishes a program and portfolio for increasing after-tax interest income or minimizing interest expense.
Instruments purchased: bankers acceptances, Euro CDs, Euro time deposits, money market funds, stocks, ARPS, money market preferred stocks, tax-exempt commercial paper.
Fees: Billed on hourly basis.
Client contact: J.J. Grady, president.

Hedged Portfolio Advisors

327 S. LaSalle St., Chicago, Ill. 60604; (312) 461-1610

Short-term funds: $55 million
Clients: 2
Investment style: Hedged Portfolio Advisors specializes in managing short-term liquidity funds using proprietary models developed to evaluate hedged arbitrage opportunities.
Instruments purchased: T-bills, T-notes, T-bonds, interest rate options, interest rate futures, options on futures, government agencies (GNMA, FNMA, FHLMC).
Client contact: H. Phillip Becker, president.

Liberty Capital Management

11 Broadway, Suite 1066, New York, N.Y. 10004; (212) 509-0550

Short-term funds: $66 million
Number clients: 9
Representative clients: Blue Cross/Blue Shield of Minnesota, Adventist Living Centers, Capitol Bankers Life Insurance.
Investment style: Liberty Capital uses quantitative, risk-averse management of Treasury securities with the goal of producing capital gains during periods of price strength. Options on futures are used to enhance returns and generate capital gains during periods of price weakness. Individually managed ARPS portfolios are also used as tax-advantaged investments.
Instruments purchased: T-bills, T-notes, interest rate options, options on futures, ARPS, government agencies (FNMA, FHLB).
Fees: 0.5% for first $20 million; 0.4% for next $30 million; 0.3% for more than $50 million.
Client contact: Susan B. Thompson, marketing coordinator.

J.P. Morgan Investment Management Inc.

9 West 57th St., New York, N.Y. 10019; (212) 826-7476

Short-term funds: $900 million
Clients: 12
Investment style: J.P. Morgan actively manages accounts using a balanced approach to trading and risk management. The investment philosophy stresses: applying fundamental analysis to time market moves, control maturity structure and allocate assets; diversifying across a broad range of fixed-income investments to increase returns and lower portfolio risk; and using rigorous credit analysis to maintain high credit quality.
Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, Yankee and Euro CDs, Euro time deposits, repos, interest rate futures, ARPS, money market preferred stocks, all government agencies, tax-exempt commercial paper, tax-exempt notes, corporate notes, private placements, mortgages, non-dollar investments.
Fees: 0.15 of 1% on the first $100 million; 0.125 of 1% on next $100 million; 0.10 of 1% on balance of more than $200 million.
Client contact: Joanne C. Cleary, vice president.

Paramount Capital Group

1 World Trade Center, Suite 1813, New York, N.Y. 10048; (212) 466-9400

Short-term funds: $35 million
Clients: 7
Representative clients: Ogilvy & Mather, Taylor Forge, Blake Construction.
Investment style: Paramount Capital Group Inc. manages an option-driven dividend capture program designed to generate an after-tax return two to three times after-tax T-bill with a maximum principal fluctuation of 1% per quarter. The portfolio is composed of 20 to 25 high-yielding common stocks. Each position is hedged by writing in-the-money qualified covered calls while the entire portfolio is protected against systematic risk with index puts. The portfolio is turned over about every 60 days to capture dividends eligible for the 85% dividend exclusion.
Instruments purchased: stock options, options on futures, stocks.
Fees: Clients may choose between an asset-based fee of 1% or a performance-based fee tied to after-tax T-bill.
Client contact: Bryan Scott Ganz, chairman.

Payden & Rygel

333 S. Grand Ave., Suite 3250, Los Angeles, Calif. 90071; (213) 625-1900

Short-term funds: $1.051 billion
Number clients: 12
Investment style: The firm takes an

Write here.

Edward J. Pierson, Vice President
Global Cash Management
Mellon Bank
One Mellon Bank Center
Pittsburgh, PA 15258

Dear Ed,

approach. Very high-quality orientation with daily valuation of all assets. Individually managed portfolios.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, all government agencies, tax-exempt notes, floating- or variable-rate issue CMO, CARS, corporates.

Fees: 20 basis points on the first $50 million.

Client contact: Jack Reynolds, vice president.

Prudential-Bache Investment Advisory Service

199 Water St., New York, N.Y. 10292; (212) 214-1411

Short-term funds: $1 billion
Clients: 120
Investment style: The firm offers near-term, fixed-income advisory services. Safety, liquidity and yield for clients' funds are sought using yield curve analysis and market timing. It takes discretionary and non-discretionary accounts servicing corporations, financial institutions and non-profit organizations.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, money market funds, interest rate options, interest rate futures, options on futures, ARPS, money market preferred stocks, government agencies (FNMA, GNMA), tax-exempt commercial paper, tax-exempt notes.

Fees: Annual retainer fee based on average assets under management.

Client contact: Margaret Kelleher, vice president and manager.

Rampart Investment Management Co. Inc.

Exchange Place, Suite 2800, Boston, Mass. 02109; (617) 742-7400

Short-term funds: $150 million.
Number clients: 12
Investment style: Rampart invests in a diversified portfolio of high-quality common stocks hedged with in-the-money call options. No more than 3% is invested in any one issuer. Market index puts are purchased for market protection.

Instruments purchased: Money market funds, stock options, stocks, tax-exempt money market funds, stock index puts and calls.

Fees: 1.5% on first $10 million; 1.25% on next $20 million; 1% on more than $30 million.

Client contact: David R. Fraley, managing director.

The Ross Capital Corp.

485 Madison Ave., New York, N.Y. 10022; (212) 308-9860

Short-term funds: $225 million
Clients: 15
Investment style: Ross Capital works to protect capital and to minimize portfolio volatility while maximizing after-tax returns by purchasing common stocks and selling call options to hedge market risk.

Instruments purchased: Stock options, stocks, buy writes (long-stock and short-call options).

Fees: Based on performance.

Client contact: Pamela Clement, executive vice president.

Schroder Capital Management International

1 State St., New York, N.Y. 10004; (212) 269-6500

Short-term funds: $200 million
Number clients: 7
Investment style: Schroder Capital Management International invests in a variety of high-quality, limited-duration investments. Its investment style is based on the selection of investments and maturities offering the best relative value.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, Yankee and Euro CDs, Euro time deposits, repos, money market funds, ARPS, money market preferred stocks, all government agencies, tax-exempt commercial paper, tax-exempt notes, floating-rate notes, short-term mortgage-backed securities (CMOs).

Client contact: John J. Mahar, vice president.

Scudder, Stevens & Clark

345 Park Ave., 25th Floor, New York, N.Y. 10154; (212) 350-8500

Short-term funds: $1.2 billion
Investment style: Scudder, Stevens & Clark actively manages for "excess returns" over buy and hold strategies. The core of the approach is a disciplined analytical process that identifies the differences between the current market structure and the firm's expectations for the yield curve, sector spreads and individual securities.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, money market funds, interest rate options, stock options, stock index futures, interest rate futures, options on futures, stocks, ARPS, money market preferred stocks, government agencies (FNMA, GNMA, FHLMC), tax-exempt commercial paper, tax-exempt notes.

Client contact: Richard R. Daniels, vice president-investments.

The Alan G. Seidner Co.

201 S. Lake Ave., Suite 705, Pasadena, Calif. 91101; (213) 681-1024

Short-term funds: $460 million
Clients: 46
Representative clients: Presbyterian Intercommunity Hospital, Bixby Ranch.
Investment style: The Alan G. Seidner Co. seeks the best relative value based on yield spread and yield curve analysis.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, government agencies (FC, SLMA, HL, FHLMC, FNMA, GNMA), tax-exempt commercial paper, tax-exempt notes.

Fees: An average of 0.125% (based on portfolio size).

Client contact: Alan G. Seidner, president.

Thorndike, Doran, Paine & Lewis

28 State St., Boston, Mass. 02109; (617) 742-8100

Investment style: Thorndike, Doran, Paine & Lewis seeks to preserve principal value and to maintain a high degree of liquidity while providing a high level of current income by investing in all sectors of the money markets.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, Yankee and Euro CDs, Euro time deposits, repos, ARPS, money market preferred stocks, government agencies (FHLMC, FNMA, SLMA, FHLB, FFCB), tax-exempt commercial paper, tax-exempt notes.

Fees: Schedules vary according to product.

Client contact: Dena Willmore, senior vice president-director of marketing.

Union Capital Management

14226 Ladue Road, St. Louis, Mo. 63017; (314) 434-9966

Short-term funds: $620 million
Clients: 50
Representative clients: Largo, Fla.; Pointe Coupee (La.) School Board; Treasure Island, Fla.

Investment style: Union Capital Management Co. analyzes a client's existing cash management system and then implements a market-timing, short-term, fixed-income management policy. The firm's specialty is public fund cash management for local governmental bodies.

Instruments purchased: CDs, T-bills, T-notes, T-bonds, government agencies (FNMA ARMs, SLMA).

Client contacts: Bob Hennecke and Ken Canepa, vice presidents.

United Security Trust Co.

1123 Chapala St., P.O. Box 22108, Santa Barbara, Calif. 93121; (714) 852-9177

Investment style: United Security Trust offers a fund, managed by an external investment advisory firm, that invests in a portfolio of floating-rate SBA notes with an average maturity of five to seven years. The fund is open for additions or withdrawals on a monthly basis. Because the majority of the SBA notes are adjusted every month, there is little principal risk for the participants.

Instruments purchased: Money market funds and SBA floating-rate notes.

Fees: 0.4%. Net return is prime rate plus.

Client contact: Thomas J. Lightvoet, vice president-investment services.

Webster Management Corp./Kidder Peabody & Co. Inc.

20 Exchange Place, New New York, N.Y. 10005; (212) 510-5016

Short-term funds: $450 million
Clients: 18
Representative clients: Fleetwood Enterprises, Heritage Communications.
Investment style: Webster offers expertise in taxable and tax-exempt securities, as well as return enhancement techniques using futures and options and dividend recapture programs. Service is customized to meet each client's specific cash flow, liquidity, administrative and tax-status requirements. Special-purpose money market mutual funds are available to small companies.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, repos, interest rate options, stock options, stock index futures, interest rate futures, options on futures, stocks, ARPS, money market preferred stocks, government agencies (FNMA, FHLMC, home loans, farm credits), tax-exempt commercial paper, tax-exempt notes, municipal or tax-exempt put bonds and variable-rate notes.

Fees: 0.3% on the first $10 million and 0.25% thereafter.

Client contact: Kenneth R. Colton, assistant vice president.

Wertheim Asset Management Services Inc.

230 Park Ave., New York, N.Y. 10169; (212) 370-6140

Short-term funds: $100 million
Clients: 3
Representative client: Calista.
Investment style: Wertheim Asset manages cash equivalents to generate the highest yield. The firm uses investments in domestic, European and Yankee instruments of major banks, A-1/P-1 rated commercial paper and U.S. government/agency issues.

Instruments purchased: CDs, commercial paper, bankers acceptances, T-bills, T-notes, T-bonds, Yankee and Euro CDs, Euro time deposits, money market funds, ARPS, money market preferred stocks, government agencies (FNMA, FHLB, FFLB, World Bank).

Fees: 0.25%

Client contact: Steven W. Golann, senior vice president.

Wharton Asset Management

595 Madison Ave., New York, N.Y. 10022; (212) 888-7680

Short-term funds: $2 million
Clients: 30
Investment style: Wharton Asset Management Corp. follows a dividend capture strategy, using utility stocks and options to hedge market risk. Arbitrage investments are used to generate capital gains.

Instruments purchased: Interest rate options, stock options, stock index futures, interest rate futures, options on futures, stocks.

Client contact: Arnold L. Mintz, executive vice president.

Data bases

BondData

Technical Data Corp., 330 Congress St., Boston, Mass. 02210; (617) 482-3341, ext. 229

BondData's information service includes a daily bond market commentary, continuous updates of the Treasury yield curve, technical market indicators, current and historical spread relationships, cash/futures arbitrage analysis and a bond market performance index.

The data, which is updated several times a day, is available through the Telerate Financial Network; the service is $165. The data can't be accessed by dumb terminals or microcomputers.

The client contact is David Warner, manager-financial services division.

Citibase

Rapidata Division of National Data Corp., 20 New Dutch Lane, Fairfield, N.J. 07006; (201) 227-0035

Introduced in 1981, Citibase provides current and historical statistics on the U.S. economy. The data base has more than 4,500 series covering money supply, prices, construction, production, employment productivity and business conditions. Typical applications include: macroeconomic analysis; sales and industry forecasting; market research; strategic planning; growth and trend analysis; and business condition analysis.

The price of the service is based on a $115 initiation fee, a $187.50 monthly fee and a costs-per-unit fee.

The data is updated daily, and can be accessed by dumb terminals and most microcomputers. Users can write their own programs to analyze the data. Also, canned programs can be used.

The client contact is Dorothy C. Monopoli, manager-data base services.

Citibase Weekly

Rapidata Division of National Data Corp., 20 New Dutch Lane, Fairfield, N.J. 07006; (201) 227-0035

Citibase Weekly contains key money supply data, interest rates, commodity prices, banking statistics and other financial indicators published on a weekly basis. The Citibase Weekly data base is maintained by Citibank's economics department.

There is a $100 initiation fee and a $100 monthly charge for Citibase members; $130 a month for non-members.

Data, which is updated weekly, can be accessed by dumb terminals and, with a Hayes modem, the IBM PC, the Apple IIe and the Northstar Advantage.

Canned programs can be used, and users can write their own.

The client contact is Dorothy C. Monopoli, manager-data base services.

An annual survey of corporate cash managers: Oct. 27.

The FORTE Financial Services System

Advantage Systems Inc., 950 Winter St., Suite 2100, Waltham, Mass. 02154; (617) 890-2400

FORTE's product lines have offered a wide range of wholesale electronic banking services for three years.

The Information Reporting products use terminals, microcomputers and Touch-Tone telephones to give customers access to multibank balance and transaction data, as well as historical reports, intraday reports and transaction search features.

The Funds Transfer products enable customers to initiate repetitive and non-repetitive wire transfers; they support multiple currencies, output locations and future-valued transfers. Extensive security controls are provided.

The ACH/Cash Concentration products include ACH payments and depository transfers for funds concentration. It provides extensive inquiry reporting and supports multiple cutoff times, output locations and warehousing.

The menu-driven Infrastructure module includes electronic banking set-up, security and system activity reporting.

In addition to the above four standard products, Advantage Systems offers customized consulting and programming services.

More than 1,000 customers use FORTE. The price of the system depends on the options purchased.

It provides current-day, previous-day and historical data for information reporting. It can be accessed by dumb terminals and microcomputers, including the IBM PC or compatibles. Users can write their own programs to analyze the data.

The client contact is Nat Welch, national account executive.

FundamentalData

Technical Data Corp., 330 Congress St., Boston, Mass. 02210; (617) 482-3341, ext. 229

FundamentalData service, provided in conjunction with Data Resources Inc., offers economic and interest-rate forecasts. The 2-year-old service also provides analysis of the domestic and international credit markets, Federal Reserve activity, Treasury auction statistics and economic releases.

The service, which is updated several times a day, costs $125 and is available through the Telerate Financial Information Network. It is not accessible by dumb terminals or microcomputers.

The client contact is David Warner, manager-financial services division.

International New Issues

Securities Data Co. Inc., 62 William St., Sixth Floor, New York, N.Y. 10005; (212) 668-0940

This data base, introduced in 1985, covers new issues of Eurobonds in all currencies since Jan. 1, 1980 by corporate, public and supranational borrowers. Foreign bond issues from Jan. 1, 1984, are available.

Up to 100 data items are maintained for each issue. In addition, screening options allow users to select issues based on date, issuer name, currency, country, industry, security type, amount, rating and more.

Users can select issues and either run standard reports or create their own. The data is updated daily, and can be accessed by dumb terminals or microcomputers. Users can write their own programs, Lotus can also be used.

The client contact is Marc Pollinger.

MoneyData

Technical Data Corp., 330 Congress St., Boston, Mass. 02210; (617) 482-3341, ext. 229

The MoneyData service uses technical analysis to advise short-term

money market investors about market direction, trading opportunities and investment strategy. The 3-year-old service provides daily commentary on the market, historical yield spreads among money market instruments, a Treasury-bill yield curve, implied forward rate analysis, arbitrage analysis for money market futures contracts and technical analysis of the foreign exchange markets.

The service, which costs $125 and is available through the Telerate Financial Information Network, is updated several times a day. The data can't be accessed by dumb terminals or microcomputers.

The contract client is David Warner, manager-financial services division.

Rapidquote

Rapidata Division of National Data Corp., 20 New Dutch Lane, Fairfield, N.J. 07006; (201) 227-0035

The 15-year-old Rapidquote II data base provides current and historical trading, financial and descriptive information on more than 52,000 U.S. securities. Historical data goes back 12 years. Equity and debt issues are included, as are more than 200 other key market and industry indexes.

Typical data available for each security are price, volume, information on dividends, beta factors, CUSIP, exchange code and E.P.S. shares outstanding.

The price of the service is based on the number of units used.

The data is updated daily and can be accessed by dumb terminals and standard microcomputers.

Canned programs are applicable and users can write their own.

Client contact is Dorothy C. Monopoli, manager-data base services.

Telerate II

Rapidata Division of National Data Corp., 20 New Dutch Lane, Fairfield, N.J. 07006; (201) 227-0035

The Telerate II data base, introduced in 1980, provides detailed information on the U.S. money market. It contains more than 500 series covering the major domestic money market instruments, key precious metal prices, Eurocurrency deposit rates and international money market. Some applications for the data are: interest-rate monitoring and analysis; exposure monitoring and analysis; swaps and arbitrage development; yield spread tracking; and tracking of precious metals.

The data, which is updated daily, can be accessed by dumb terminals and most microcomputers.

Users can write their own programs to analyze the data. The firm also has canned programs.

The price of the system is based on the number of units used.

The client contact is Dorothy C. Monopoli, manager-data base services.

VERIBANC

VERIBANC Inc., P.O. Box 2963, Woburn, Mass. 01888; (617) 245-8370

VERIBANC, introduced in 1982, provides detailed financial data for every federally insured bank, savings and loan and credit union. The firm's reports are used to support cash management decisions and to perform creditworthiness analysis.

VERIBANC, which is used by more than 5,000 clients, costs $20 to $500, depending on the amount of data purchased.

VERIBANC's data includes the latest regulatory releases. It cannot be accessed by dumb terminals, but can be accessed by an IBM compatible microcomputer with 360K byte or 1.2M byte diskettes. The data can also be accessed by Lotus, RBASE and editors capable of manipulating ASCII files. Users can write their own programs to analyze the data.

Client contact is Warren G. Heller.

Zip Code Demographic Data Base

Rapidata Division of National Data Corp., 20 New Dutch Lane, Fairfield, N.J. 07006; (201) 227-0035

The Zip Code Demographic Data Base, introduced in 1980, provides detailed information on population and income by ZIP code. Aggregations may be done by postal section center, ZIP code range, state, county, region, DMA and individual ZIP code. Data fields available include age, education, family income, home values, education and number of cars.

The price of the service is based on a per ZIP code fee, which varies with the type and number of reports requested.

The data is from the 1980 U.S. Census. It can be accessed by dumb terminals or standard microcomputers.

The firm provides canned programs to process the data, and users also can write their own.

The client contact is Dorothy C. Monopoli, manager-data base services.

Software

CASHENS

Gifford Fong Associates, 1600 Riviera Ave., Suite 285, Walnut Creek, Calif. 94596; (415) 932-1910

CASHENS is an analytical and administrative tool for those concerned with short-term investment portfolios. Introduced in 1985, it consists of three integrated modules:

CASHRATE provides real-time representative market quotations on a variety of different money market instruments and maturities. Quotations are converted to equivalent yields and spreads are analyzed. Maturity decisions are aided by the calculation of forward break-even rates;

CASHCALC provides an immediate and exact evaluation of a trade, comparison between different securities or maturities, or valuation of a repo or reverse;

CASHPORT is a comprehensive management information system to monitor the money market portfolio. Various portfolio reports are readily available for accounting and management.

The software runs on an IBM PC (XT or AT) that operates on an MS-DOS system with a minimum memory of 640k and a 10 MB fixed disk.

The client contact is Kathleen Earley, applications consultant.

ENCORE!

Ferox Microsystems Inc., 1701 N. Fort Myer Drive, Suite 1205, Arlington, Va. 22209; (703) 841-0800

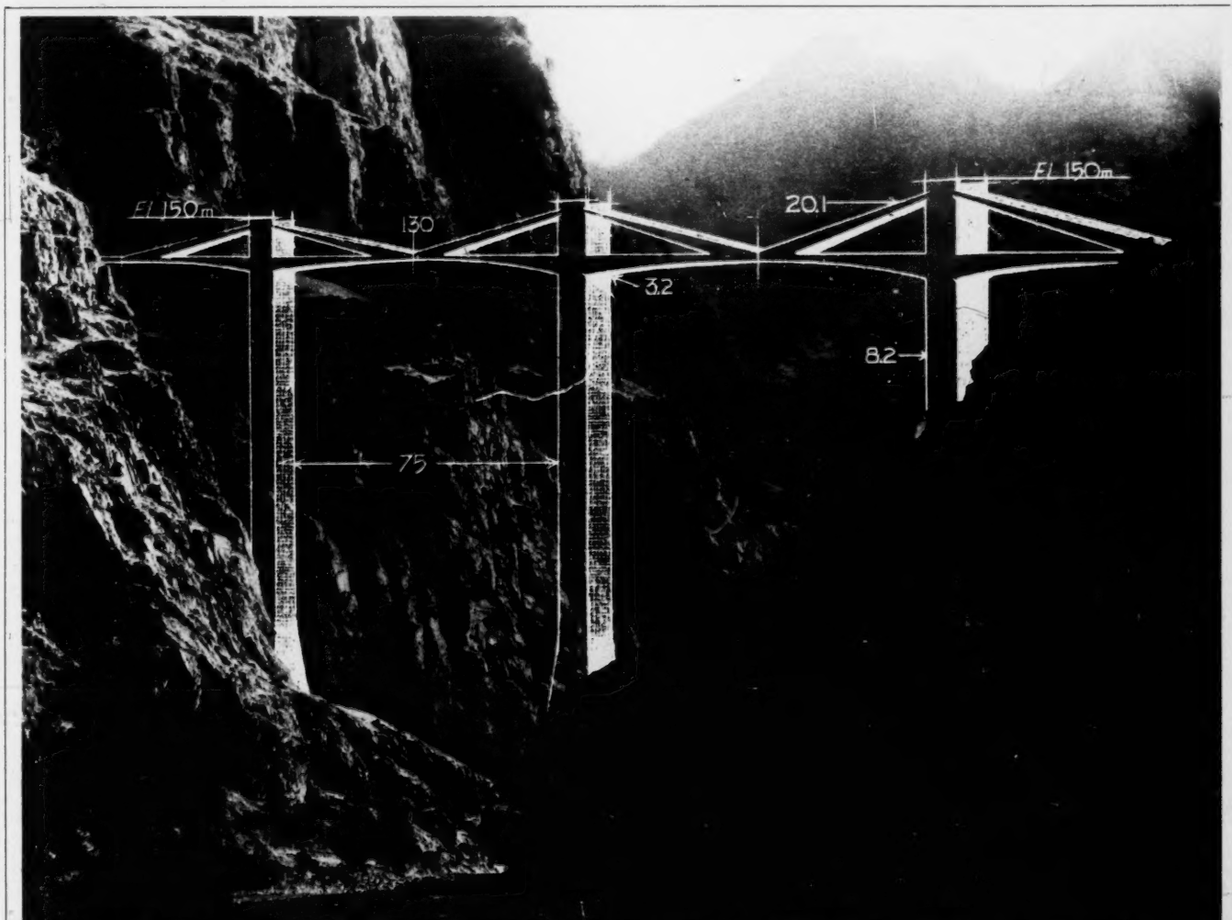
ENCORE! is a professional support tool used to aid corporate management in decision-making and financial modeling. The program gives mainframe results from a microcomputer.

ENCORE! is used for budgetary planning and control; financial reporting and projecting; corporate consolidations; strategic planning; marketing forecasts; investment analysis; merger/acquisitions; cash flow forecasts; business modeling; and systems development.

ENCORE! contains: goal seeking, U.S. tax tables, ACRS depreciation, IRR, NPV, LOAN, Monte Carlo simulation and date arithmetic. ENCORE! is self-documenting. Customer support is provided.

About 1,500 copies of ENCORE! have been sold since its introduction in September 1983. The program sells for $475.

ENCORE! can run on an IBM PC (XT AT) or compatible computer. If the computer operates on a hard-disk drive, the memory must be at least 320k and only one disk is needed. If the computer operates on a floppy-disk drive, the memory must be at least 512k, and two disks are needed.



Your cash management landscape. Designing a better way across it.

The CashPro® family of cash management services now includes an important new product. It's our CashPro Treasury System: a microcomputer based system that goes further than other systems in recognizing the fact that every customer's needs are different.

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Our treasury management specialists help identify your needs and match them with a customized solution. Once installed, the system further allows you to customize output without the need for programming experts.

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ENCORE! can read ASCII Files from data base.

The client contact is Michael L. Burke, director of marketing.

MAPS/MICROLINK

Ross Systems Inc., 1860 Embarcadero Road, Palo Alto, Calif. 94303; (415) 856-1100

MAPS/MICROLINK is the first intelligent bridge between the PC-based spreadsheets and sophisticated decision support and accounting tools on the VAX. It permits transfer of financial data between PC-based spreadsheets and centralized, VAX-based accounting and modeling data bases. Designed to work with MAPS/GL and MAPS/MODEL, MAPS/MICROLINK gives financial managers the ability to expedite financial planning budgeting and to consolidate departmental budgets at a corporate level.

The system offers: capability of distributed financial information throughout company; security and prevents data tampering by PC users; single key transfer; menu-driven screens; controlled data selection; interfacing with Lotus 1-2-3 and other popular DIF formatted spreadsheets. It is written in BASIC and ANSI COBOL.

The product was introduced in 1985. About 24 copies have been sold at a starting price of $5,000.

The software can be run on IBM PCs and compatibles. It uses PC/DOS, has a minimum memory of 215KB and uses a minimum of two floppy drives.

Jim Griffin is the client contact.

MAPS/PRO GRAPH

Ross Systems Inc., 1860 Embarcadero Road, Palo Alto, Calif. 94303; (415) 856-1100

Designed to run on Digital Equipment Corp.'s Professional 300 series personal computer, MAPS/PRO GRAPH can reveal trends, illustrate variances in performance and picture future plans. The system is for the non-programming professional who wants boardroom-quality graphs. Graphs can be displayed on the PRO monitor or interfaced to a Hewlett Packard graphic plotter. It gives a choice of black and white or color screen displays.

It features menu-driven commands and one-stroke function keys. Full screen HELP is available whenever needed.

Since it was introduced in 1982, about 560 copies have been sold. List price is $250.

The software can be run on DEC Professional 350 microcomputer. The operating system is P/OS. Minimum memory is 512 KB. The system uses a hard disk and one floppy drive.

The software can be plugged into DIF formats and ASCII format data bases.

Jim Griffin is the client contact.

MAPS/PRO MODEL

Ross Systems Inc., 1860 Embarcadero Road, Palo Alto, Calif. 94303; (415) 856-1100

MAPS/PRO MODEL has many features of a "mainframe class" financial modeling language. The system was designed to work with MAPS/MODEL financial modeling software on a VAX minicomputer.

MAPS/PRO MODEL can assist with: budget and performance reporting; performance tracking; financial statement preparation; consolidations; cash flow forecasting; production modeling; capital budgeting; resource allocation; marketing analysis.

MAPS/PRO MODEL is designed to give the user the benefit of the Professional's P/OS multitasking operating system, Winchester disk drive, bit-mapped graphics, special function keys and application menus.

Introduced in 1982, about 570 copies have been sold. List price is $1,250.

The software can be run on DEC Professional 350/380 microcomputers. The operating system is P/OS. Minimum memory is 512KB. The system uses a hard disk and two floppy drives.

The software can be plugged into all ASCII formatted data bases.

Jim Griffin is the client contact.

MASTER BRAIN PLUS

Decision Programming Corp., 5640 Nicholson Lane, Suite 103, Rockville, Md. 20852; (301) 231-6393

MASTER BRAIN PLUS offers standard fixed-income computation with analytical features including bond duration, compound realized yields, volatility measure and "what-if" horizon analysis for user-specified interest rate assumptions. Range calculations display results for changes in price, yield, reinvestment or interest rates in user-specified increments.

The enhanced version of the product was introduced in January. About 50 copies have been sold. The list price is $675.

The software can be run on IBM and compatibles and on Apple microcomputers. Minimum memory is 256K. System runs on a minimum of one low-density disk.

The program can link to Lotus, Symphony, DBASE and ASCII files.

Marie Kalesnik Koczela, information services, is the client contact.

The Smart Software System

Innovative Software Inc., 9875 Widmer Road, Lenexa, Kan. 66215; (913) 492-3800 or (800) GET-SMART

The Smart Software System is an integrated package of business applications software including data base manager, spreadsheet with graphics, word processor, communications, time manager and applications programming language. The Smart Spreadsheet size may be up to 999 columns by 9,999 rows.

More than 130 advanced functions are included and up to 50 spreadsheets may be in memory, on screen simultaneously allowing 3-D spreadsheet construction. Smart reads/writes 1-2-3 files. Seventy-eight graph designs are available and support for the IBM Enhanced Graphics Adaptor is provided. The disk-based data base manager allows up to 1 million records per file with 255 fields per record and 1,000 characters per field. All applications feature multilevel password protection.

The product was introduced in September 1984; about 60,000 copies have been sold. List price is $895 (single-user system) and $495 (spreadsheet only or data base manager only).

The software can be run on IBM PC, XT, AT and compatibles using the DOS operating system with a minimum memory of 256K and a minimum of two floppy disks or one floppy and one hard; on LAN using the DOS 3.1 operating system with minimum memory 384K; the AT&T 7300 with the UNIX operating system using one floppy disk and one hard disk; or Tandy using the DOS operating system with a minimum memory of 256K and a minimum of two floppy or one floppy and one hard disk.

The software program can read and write both Lotus WKS files and DIF files.

Paul Donohue, sales manager, is the client contact.

TREASURY 1

Treasury Strategies Inc., 180 N. LaSalle St., Chicago, Ill. 60601; (312) 443-0840

The system allows the user to control and manage banking service charges by creating a user-specified standard analysis format. It allows price/cost comparisons on a bank-to-bank or product-to-product basis.

The product was introduced in December 1983. About 1,000 copies have been sold. List price is $6,000 for master system and $2,500 for basic system (for smaller companies).

The software can be run on IBM PC, XT, AT and most compatibles using the PC-DOS operating system with a minimum memory of 256K and a minimum of two floppies; a hard disk is preferable.

The software program has a link to Lotus 1-2-3.

Richard J. Poje, principal, is the client contact.

Treasury workstations

The Account Analysis Monitor

Phoenix-Hecht, 550 Frontage Road, Northfield, Ill. 60693; (312) 441-9080

The Account Analysis Monitor standardizes account analysis statement formats and terminology. It also provides Lotus-compatible software to perform comparative and trend analyses across multiple banks and over time.

The monitor is a new product.

The client contact is Gary D. Schneider, senior consultant.

Automated Treasurer

First Tennessee Bank, 165 Madison Ave., Memphis, Tenn. 38103; (901) 523-4767

The Automated Treasurer is a fully loaded treasurer workstation product able to handle balance and transaction reporting, money transfers, Lotus interface and the preparation of cash flow worksheets.

Its client is the University of Tennessee.

Larry Sistrunk, vice president, is the client contact.

BankLink

BankLink USA, 52 Broadway, New York, N.Y. 10004; (212) 701-4014

BankLink I is a comprehensive time-sharing-based cash management system; BankLink II is a microcomputer-based treasury workstation. Other services include MicroReporter, a simplified treasury workstation option for large middle-market corporations; and MicroLink, a balance and transaction delivery service designed for smaller and midsize businesses.

BankLink has more than 80 licensees worldwide, serving more than 10,000 corporations.

The client contact is Tracey Uberroth, marketing representative.

Directline Banking

Bank of Montreal, First Canadian Place, 22nd Floor, Toronto, Ontario M5X 1A1; (416) 867-6845

Directline Banking provides on-line real-time access to U.S.-dollar and Canadian-dollar accounts in any of 1,200 branches nationwide. It also provides detailed transaction reporting, real-time third-party transfers and wire payment initiation. The system, introduced in 1982, uses IBM PC (compatible) software to automate data retrieval and to interface with internal applications.

The client contact is Molly Flemming, product manager.

FirstWindow

First National Bank of Chicago, 1 First National Plaza, Chicago, Ill. 60670; (312) 407-8038

FirstWindow is a microcomputer umbrella product that accesses all of First Chicago's cash management products. It collects balances in autodial or manual mode and translates BAI data directly to Lotus' worksheet format.

Six clients use FirstWindow, including Henry Crown and the Chicago Board Options Exchange.

The client contact is Scott Bates, senior vice president.

Florida MicroLink

Florida National Bank, 225 Water St., Jacksonville, Fla. 32202; (904) 359-5620

Florida MicroLink is a microcomputer-based information exchange system that requires neither software purchase nor licensing fee. Current functions include multibank balance and transaction reporting, wire transfers, cash position worksheet, check manager and spreadsheet output.

Florida MicroLink is used by eight clients, including Alliance Mortgage Co., Coca-Cola Bottling Co. of Miami and Budget Uniform.

The client contact is Paul Hyson, vice president.

Harris Financial Manager

Harris Trust and Savings Bank, 111 W. Monroe, Chicago, Ill. 60690; (312) 461-7180

The Harris Financial Manager is a full-function workstation that can be customized by the corporate user. Harris emphasizes customer training and support by individuals familiar with treasury operations and microcomputer software.

The client contact is Charles Howes, assistant vice president.

ICMS

ICMS, 1150 Bayhill Drive, San Bruno, Calif. 94066; (415) 583-3714

ICMS (Integrated Cash Management System) is an eight-module treasury management system: communications; debt/investment; worksheet/balance manager; accounting manager; forecast; bank/division relationship manager; foreign exchange; and utilities. ICMS, which is available on IBM mainframes and IBM PCs and compatibles, is designed for companies with complex treasury requirements.

Clients include Chevron, Apple Computer, Hyundai Motor America and Businessland.

The client contact is Jeffrey W. Price, director of sales and marketing.

InfoCash MicroStation

Chase Manhattan Bank, 195 Broadway, New York, N.Y. 10007; (212) 669-6040

InfoCash MicroStation is a workstation that uses microtechnology to automatically retrieve and display banking activity and information from the customer's banking network. The MicroStation, through the Trade Manager module, also provides transaction initiation capabilities to Chase operations units for money transfers, ACH transactions, commercial paper issuance and letters of credit.

It is used by 200 firms, including Ingersoll-Rand, Pfizer and Conagra.

The client contact is J. Putnam, vice president.

INTERPLEX

MH Financial Management Systems Inc., 140 E. 45th St., New York, N.Y. 10017; 1-800-MHT-PLEX

The INTERPLEX family of four micro- or minicomputer-based financial management systems offers such treasury management functions as cash and bank management, investment and debt management and commercial paper and foreign exchange management. The INTERPLEX product line and services include hardware, software, training, documentation, upgrades and enhancements.

MH Financial Management offers installation and support capabilities, and also conducts meetings to give users an opportunity to learn about new applications and to contribute suggestions for future enhancements.

INTERPLEX is used by 134 companies, including American Tobacco, Metromedia, Morton Thiokol and U.S. Steel.

The client contact is George Chelius, group vice president-sales.

MicroCTS

Capital Systems Group Inc., 1803 Research Blvd., Rockville, Md. 20850; (301) 762-1200

MicroCTS is a user-friendly, integrated treasury workstation with 12 modules for communications, debt/investment, bank relationship, signatory tracking and writing reports.

MicroCTS is used by 112 clients, including Commonwealth Aluminum, Penn Mutual Insurance, Uniroyal and Broward County, Fla.

The client contact is John N. Gonzales, executive vice president.

MicroExpress I and II

Wells Fargo Bank, 420 Montgomery St., San Francisco, Calif. 94163; (415) 396-7777

MicroExpress is an IBM PC (XT AT) compatible treasury workstation with autodial function to retrieve report formats or BAI reports, and to parse information into customer-designed electronic spreadsheets.

There are 131 clients.

The client contact is David P. Kurrasch, vice president.

MicroTalk

ADS Associates Inc., 23586 Calabasas Road, Suite 200, Calabasas, Calif. 91302; (818) 347-9100

MicroTalk is a microcomputer-based voice-response system that uses a Touch-Tone telephone interface to enable users at remote locations to input and receive information. The system, which has just been placed on the market, lends itself to multiple applications, such as balance information reporting, deposit concentration and cash vault ordering. MicroTalk can accept downloading of information from and can upload information to a mainframe or a minicomputer. It generates complete audit trail, data base and status reports.

The client contact is Hillary Apelbaum, marketing representative.

RESOURCE

ADS Associates Inc., 23586 Calabasas Road, Suite 200, Calabasas, Calif. 91302; (818) 347-9100

RESOURCE is a self-contained, on-line, real-time, microcomputer-based software system for cash and portfolio managers. It is modular in design, menu-driven, flexible, easy to customize, available as a single station or an integrated network and frequently interfaced to mainframe or minicomputer systems.

RESOURCE monitors cash positions by retrieving and consolidating bank balance information. A daily cash position worksheet gives an up-to-date picture of cash status, integrating data from the entire system. A cash ledger automates cashbook functions.

It tracks portfolios of fixed-income investments, overnight funds and debt, including commercial paper. It performs calculations on yield and accrued interest, and provides management reports.

The system is used by 350 clients, including Ashland Oil, Conrail, Electronic Data Systems and TRW.

The client contact is Hillary Apelbaum, marketing representative.

Treasury Microcomputer Software

NCNB National Bank, 1 NCNB Plaza, T18-1, Charlotte, N.C. 28255; (704) 374-7311

The basic version of the system automatically retrieves bank data and transfers it to the user's spreadsheets.

More sophisticated software modules are available for balance reporting/cash position management, investment and debt management, bank relationship management, electronic funds transfer (wire, ACH, DTC) and user-defined reporting. NCNB provides installation, training and support. All software runs on the IBM PC (XT AT) and compatibles.

Treasury Microcomputer Software is used by six clients, including James River Corp. and Blue Cross and Blue Shield of Maryland.

The client contact is Phil A. Leonard, vice president.

Treasury Workstation

United Missouri Bank of Kansas City, 10th and Grand, Kansas City, Mo. 64141; (816) 556-7500

Treasury Workstation is a microcomputer-based system that allows the corporate cash manager to access balance and activity information, download data for further analysis and expedite wire transfer requests.

Client contact is Margaret Smith, corporate services representative.

Treasury Workstation

First Florida Bank, P.O. Box 1810, Tampa, Fla. 33601; (813) 224-1447

Treasury Workstation can be used for balance/transaction reporting, as a load to Lotus, for cash decision worksheets, money transfers, security communications and receipts and disbursements. Three clients use the system.

The client contact is Bill Dacko, vice president-cash management.

Canadian banks

Bank of Nova Scotia

44 King St. W., Toronto, Ontario M5H 1H1; (416) 866-3959

Executive: Ray G. Darke, general manager.
Contact: Carmen Giordano.
C.M. professionals: 70

The Bank of Nova Scotia's Cash Management Services offers international wire transfers and FX rates in addition to those terminal-initiated services indicated on the chart.

It also offers a general cash management review.

Its account reconciliation package was developed in-house.

Canadian Imperial Bank of Commerce

237 Park Ave., New York, N.Y. 10017; (212) 309-8810 and Commerce Court Postal Station, Toronto, Ontario, M5L 1A2; (416) 784-6374

Fortune 1000 total clients: 500
Executive: John Bumister, vice president-cash management services.
Contact: Gary Pickell, senior manager, New York; David C. Prescott, assistant general manager, Toronto.

Canadian Imperial Bank of Commerce's Cash Management Services Division uses the lockboxing network of the Mellon Bank. The bank has stand-alone sites in Vancouver, Calgary, Winnipeg, Regina, Toronto, Montreal and Halifax.

Terminal-initiated services not on the chart include payroll services, real time balance reporting, money transfers and securities management.

The bank has overseas lockboxing by arrangement in most world financial centers.

Its lockbox/disbursement studies are based on its own model. The consulting group covers all aspects of the field, especially centralized banking, cross-border cash management and Canadian cash management for U.S. corporations.

The bank developed its account reconciliation system in conjunction with Disc Inc. Other services include netting, pooling and offsetting.

Citibank Canada

University Place, 123 Front St. W., Suite 2000, Toronto, Ontario M8V 3L8; (416) 947-5637

Executive: Brian K. McArthur, vice president-electronic banking.
Contact: Leslie J. MacKinlay, assistant vice president-electronic banking, in Toronto at (416) 947-5534; Bruce Foster, manager, in Calgary at (403) 233-2125.

Citibank Canada's Electronic Banking Department will provide Canadian companies with U.S. cash management services in controlled disbursement, terminal-initiated commercial paper and stop payments and depository transfer checks through the ACH.

Royal Bank of Canada

Royal Bank Plaza, Toronto, Ontario M5J 2J5; (416) 974-5986

Executive: J.R. Brewer, cash management services.
Contact: P.D. Erratt.
C.M. professionals: 10

Royal Bank of Canada's Cash Management Services Department has stand-alone lockbox processing facilities at various points across Canada.

Its account reconciliation package was developed in-house.

The Toronto-Dominion Bank

Toronto Dominion Centre, P.O. Box 1, Toronto, Ontario, M5K 1A2; (416) 982-2362

Executive: R.A. "Tony" Cook, general manager-cash management services group.
Contact: Ken Buchanan, manager-cash management services.
C.M. professionals: 35

Toronto-Dominion Bank's Cash Management Services Group has stand-alone lockbox processing facilities in the major cities of Canada.

Terminal-initiated services not on the chart include customer payroll service.

The bank has international lockbox collection sites in the United States through Philadelphia National Bank.

The consulting group provides customized studies, usually using the Phoenix-Hecht model. The group also offers full cash management studies.

The bank's account reconciliation package was developed in-house. Other services offered include payroll, an overnight fund vehicle and general investment reporting.

Canadian associations

Cash Management Association of British Columbia

Corporate membership: 52
Meetings: Six a year.
Contact: Yvonne Ross, British Columbia Central Credit Union, 1441 Creekside Drive, Vancouver, British Columbia V6B 3R9; (604) 734-1604.

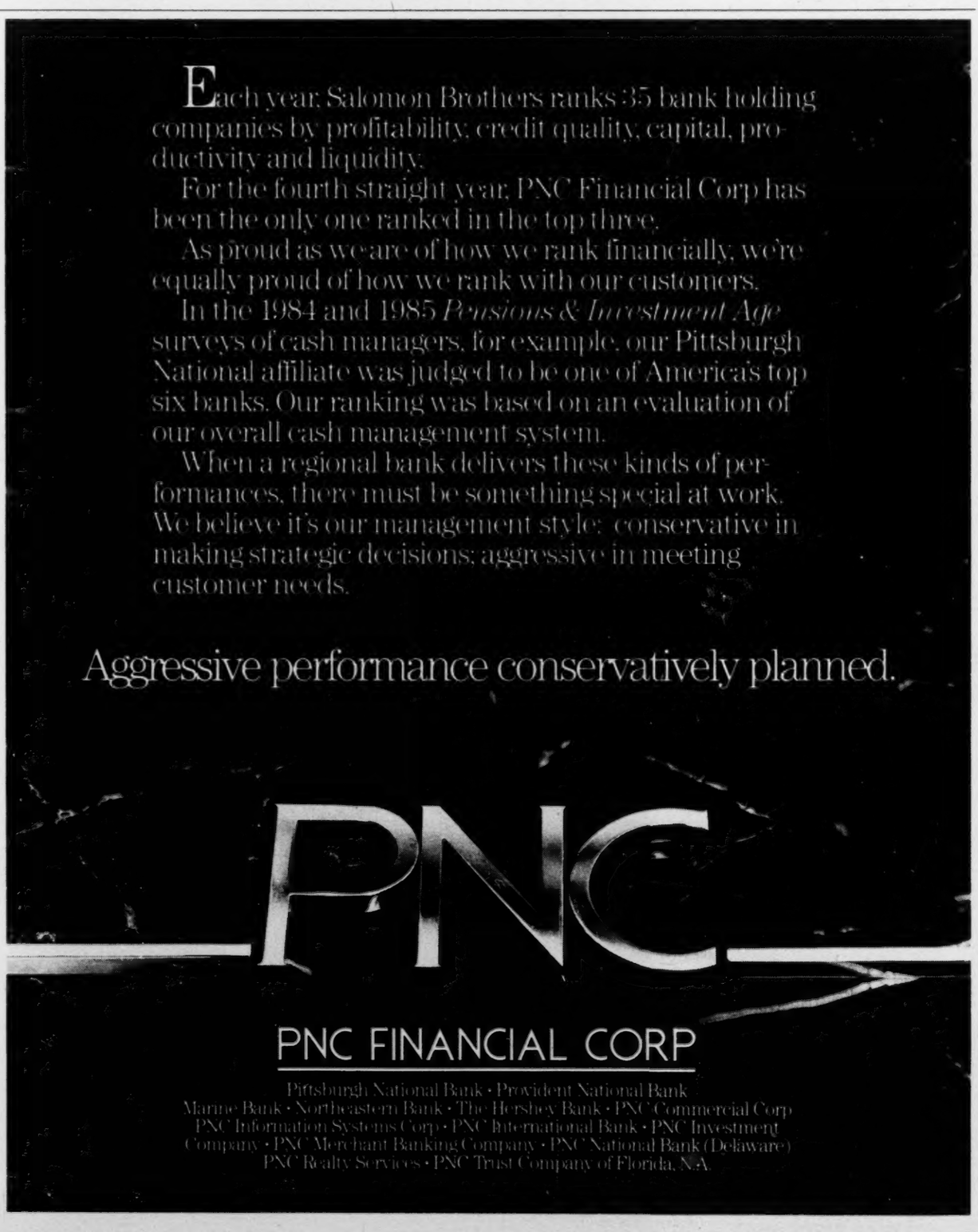
Calgary Cash Management Association

Corporate membership: 61
Meetings: Six a year.
Contact: Brian Volstad, P.O. Box 2100, Calgary, Alberta T2P 2M5; (403) 268-2627.

Cash Management Association of Canada

Corporate membership: 477
Meetings: Monthly regional meetings, annual nationwide conference.
Contact: Yvonne Ross, Box 112, 150 King St. W., Toronto, Ontario M5H 1J9; (416) 979-6118.

A directory of international investment advisers: Aug. 4.



Cash & Treasury Management Association

Corporate membership: 73
Meetings: Six times a year.
Membership fee: $100
Contact: W.D. Yeates, P.O. Box 112, Sun Life Centre, 150 King St. W., Toronto, Ontario M5H 1J9; (416) 979-6118.

Edmonton Cash Management Association

Corporate membership: 30
Corporate members: Alberta Energy Co.
Meetings: Last Tuesday of each month.
Membership fee: $125
Contact: Michael B. Neuman, Box 559-21, 10405 Jasper Ave., Edmonton, Alberta T5J 3S2; (403) 427-9766.

Insurance Companies Cash Management Group

Corporate membership: 37
Meetings: Twice a year.
Membership fee: $15
Contact: Paul Gray, The Canada Life Assurance Co., 330 University Ave., Toronto, Ontario M5G 1R8; (416) 597-1456.

Cash Management Association of Manitoba

Corporate membership: 28
Meetings: Six times a year.
Contact: Laura M. Allan, Manitoba Telephone System, P.O. Box 6666, 489 Empress St., Winnipeg, Manitoba R3C 3V6; (204) 947-8270.

Cash Management Association of Montreal

Corporate membership: 30
Corporate members: Aluminum Co. of Canada, Avon Canada, Bell Canada, Bell Canada Enterprises.
Meetings: Bimonthly.
Membership fee: $125 (Canadian)
Contact: Andrew Balfour, c/o Steinberg Inc., 3500 de Maisonneuve St. 14th Floor, Alexis Nihon Plaza Tower A, Montreal, Quebec H3Z 1Y3; (514) 931-9331, ext. 7159.

Ottawa Cash Management Association

Corporate membership: 40
Meetings: Nine times a year.
Membership fee: $100
Contact: T. Robertson, P.O. Box 655, Ottawa, Ontario K1P 5T9; (613) 996-6606.

Cash Management Association of Saskatchewan

Corporate membership: 35
Meetings: Monthly, with summer and Christmas breaks.
Membership fee: $50
Contact: Don Pearson, Sixth Floor, 2350 Albert St., Regina, Saskatchewan S4P 4A6; (306) 787-3923.

Toronto Cash Management Society

Corporate membership: 102
Meetings: Six times a year.
Membership fee: $50
Contact: Bev Dinsmore, Box 754, Adelaide Street Post Office, 36 Adelaide St. E., Toronto, Ontario, M5C 1J0; (416) 233-5811.

Upcoming special features in *Pensions & Investment Age* include: a directory of international advisers, Aug. 4; union funds update, Sept. 1; directory of real estate advisers, Sept. 15; institutional brokerage survey, Sept. 29; a look at public pension funds, Oct. 13; a survey of cash managers; a look at venture capital, Nov. 24; defined contribution plans, Dec. 8.

Corporations meet short-term needs

Commercial paper use increases

By Chuck Paustian

More and more corporations are using the commercial paper market to meet short-term financing needs, reducing the amount of loans issued by money-center banks.

Low interest rates continue to make issuing commercial paper a cost-efficient means of raising capital for high-quality companies, analysts said.

Creative and sometimes complex credit enhancements are opening the market to additional companies, which had been unable to access the market previously, the analysts added.

The money-center banks seem ready to relinquish their role of providers of short-term capital, choosing to focus on other revenue sources.

Statistics released by the Federal Reserve Bank of New York show the growth of the commercial paper market has skyrocketed during the past several years.

The average amount of non-financial commercial paper outstanding has risen to $81.52 billion during the first quarter of 1986, up from an average of $63.96 billion during the fourth quarter of 1980.

Meanwhile, short-term bank loans, as a percentage of all short-term, non-financial business credit, have declined to 27.5% during the first quarter of 1986, down from 32.5% during the fourth quarter of 1980.

Analysts say the reason for the growth is simple — cost.

"I think one of the main factors is these top-quality corporate credits can borrow in the commercial paper market at a lower rate than the banks can profitably undertake," said C. Reed Parker, executive vice president and vice chairman of the credit rating committee at Duff & Phelps Inc., Chicago.

On July 7, the prime lending rate was 8.5%, while the rate for 30-day commercial paper sold through dealers was 6.65%.

Lawrence A. Kudlow, chief economist at Bear, Stearns & Co. Inc., New York, agreed the spread between the prime lending rate and commercial paper rates was a major factor.

"Second, I think the money markets have more liquidity than the banks do," Mr. Kudlow added. "Banks are not willing to make a lot of loans."

Iowa Electric Light & Power Co., Cedar Rapids, does all of its short-term financing in the commercial paper market, said J.B. Rehnstrom, senior vice president-finance and secretary of the company.

Iowa Electric, with $454 million in revenues in 1985, has between $10 million and $12 million in commercial paper outstanding, Mr. Rehnstrom said.

He said the commercial paper is supported by $60 million in back-up bank lines of credit from four banks, led by First National Bank of Chicago.

"We still feel that, competitively, the commercial paper rates still beat anything we've seen from the banks," he said.

Duff & Phelps' Mr. Parker said commercial paper issuers traditionally have belonged to an exclusive club of only the highest-quality corporations.

The quality of a company's credit is based on, among other things, its size and the nature of its business.

"Once into the club though, you have access to the cheapest money going short of Treasury bills," he said.

In an attempt to bring more companies into the commercial paper markets, investment bankers are developing a vast number of different credit enhancements for the marginal companies.

"There are probably as many ways as investment bankers can think of," said Gary Miller, senior analyst with Moody's Investors Service Inc., New York.

"Typically you have to be a fairly strong credit to issue commercial paper on your own," he said.

In addition to credit enhancements, companies are becoming more creative in their selection of which assets are used to pay off the commercial paper.

For example, CSW Credit Inc., a captive-finance subsidiary of Central and South West Corp., Dallas, purchased at a discount the accounts receivables of the parent's five utility subsidiaries.

John E. Taulbee, executive vice president and chief financial officer of Central and South West said the company borrowed money, first from the banks and then through the commercial paper market, to purchase the accounts receivables.

By transferring that asset to CSW Credit, he said, it enables the company to reduce its debt-to-equity ratio.

"What that does is by highly leveraging it, we can share in the increased profits," said Mr. Taulbee, adding the higher profits would lead to lower rates for customers.

He said CSW Credit's commercial paper program was started in January; the company has more than $150 million in commercial paper outstanding.

Mr. Taulbee said the commercial paper program has eliminated all of CSW Credit's short-term bank loans.

"We still will have bank lines at least equal to the largest amount of commercial paper outstanding," he said. "But for a top-rated company, commercial paper is almost always cheaper (than bank loans), even with adding the cost of the back-up lines."

As corporations continue to turn to the commercial paper market for their short-term financing needs, banks appear willing to forgo the loan business while concentrating on other sources of revenue.

"Banks are anxious to expand in the consumer area and in the international area, but they are not anxious to expand in the corporate loan area," said Bear Stearns' Mr. Kudlow.

Anthony J. Carfang, principal of Treasury Strategies Inc., Chicago, which offers consulting services to banks, said the large banks' loan customers will comprise those companies that could not issue commercial paper.

"It means the larger banks are going to be stuck with riskier loans," he said.

Mr. Carfang said some banks, such as Bankers Trust Co. and Citibank, both in New York, still serve as intermediaries for borrowers and lenders, although the loan does not actually pass through the bank.

"Just because they can't lend directly doesn't mean they still can't make a fee for facilitating the transaction," he said.

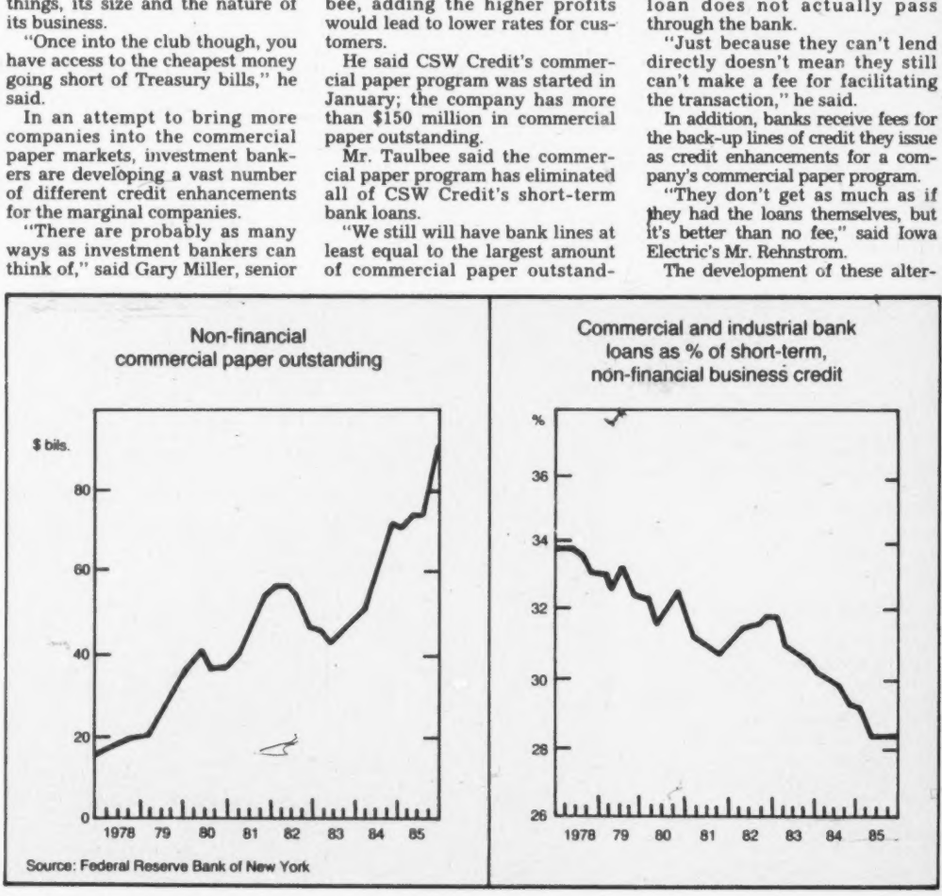
In addition, banks receive fees for the back-up lines of credit they issue as credit enhancements for a company's commercial paper program.

"They don't get as much as if they had the loans themselves, but it's better than no fee," said Iowa Electric's Mr. Rehnstrom.

The development of these alternative lines of businesses has changed the appearance of some banks.

"Now that banks have gotten the hang of corporate finance, you see some banks restructuring and looking more like investment banks," said Mr. Kudlow.

Everyone contacted agreed unless there is a major adverse change in the commercial paper market, companies will continue to use the instruments to finance their short-term needs. ■



GM sets up network . . .

Continued from page CM1.

GM, which has been studying the idea for about three years and seriously working on it for about 18 months, will begin making payments under it soon, possibly by the new model year in the fall.

GM is believed to be still negotiating with its suppliers.

Sources said suppliers ought to be willing to adopt the system, not only because of GM's influence as a major purchaser, but also because of the system's advantages, such as facilitating payments and information.

GM would like suppliers to renegotiate purchase terms, effectively to preserve some of the payment float of the paper-based system, sources said.

The automaker first explored working with the ACH, according to several sources.

"GM was pushing for (ACH) improvements on corporate trade payments," one said. "But the ACH was dragging its feet and so were the banks. So GM . . . decided to create its own EFT system. It was a matter of principal."

The association has had a number of discussions with GM executives about adapting the ACH to its needs, officials said.

One suggestion, according to other sources, was for GM to use a proposed ACH electronic information format, the so-called CTX. One source said CTX "could possibly accommodate GM."

"But it's two or three years away," he added. Besides, the "NCCMA's reaction to CTX is to propose a second payment system."

Although other sources said GM's concern about ACH payment security helped prompt the decision to use another system, others — including George White, president of White Papers Inc., Upper Montclair, N.J. — disagreed.

Karen Reed, the NACHA's public relations director, acknowledged questions arise about potential security problems, including confidentiality, interlopers and liability in defaults. "My response to that is that the ACH is a very secure system."

"It is nothing to worry about," added Teresa Turner, NACHA operations director.

Nevertheless, NACHA is concerned about GM's plans. "There is a great deal of concern about setting up a system that will essentially do the same thing as the system now in use does," Ms. Reed said.

"I feel confident they will turn to the ACH and not set up their own system, but they certainly have not made a public statement on what they are going to do." ■

Interest rates will fall, latest forecasts say

By Andrea Finamore

Short-term interest rates will take a moderate step down within the year because of sluggish growth prospects, low inflation and Congress' expected overhaul of tax laws.

This is the consensus of a group of bank economists, security analysts and money managers surveyed by *Pensions & Investment Age*.

Less clear was the effect of the expected lower corporate tax rates on dividend capture investment programs. For corporations paying high taxes, dividend capture generally has provided an attractive spread, on an after-tax basis, to the returns on taxable short-term investments. But such program managers gave mixed views on whether dividend programs would maintain such a spread under a lower corporate tax rate.

Inflation forecasts for the next year varied widely among the eight economists and other experts interviewed. The lowest was 1%, predicted by Michael Drury, senior economist, A. Gary Shilling & Co., New York.

The highest — 3.5% — was made by Joel Keffer, economic analyst, Irving Trust Co., New York.

Most analysts predicted interest rates on commercial paper and Treasury bills will decline by late this year.

High-grade, dealer-placed 90-day, 60-day and 30-day commercial paper rates were, respectively, 6.5%, 6.55% and 6.65% near mid-July, while one-year T-bills were paying 6.36%.

John Rutledge, chairman, Claremont Economics Institute, Claremont, Calif., predicted 30-day commercial paper rates would fall over the next three quarters, respectively, to 6.3%, 5.7% and 5.1%.

"The world is unwinding from inflation, so policy-makers are afraid to overstimulate the economy in fear of inflation," said Alan Sinai, chief economist, Shearson Lehman Brothers Inc., New York.

"Restrictive policies result, causing slow growth and decreased interest rates. There is an international trend with weak economic growth. If it doesn't improve, the central banks will have to step in."

"It's expected that the Federal Reserve will adopt an accommodating monetary policy to decrease interest rates to stimulate the demand for goods and services," said Wayne Stevens, director of research, Duff & Phelps Inc., Chicago.

Another Duff & Phelps executive, Reed Parker, executive vice president and vice chairman of the credit ratings committee, sees the economy as "having extra oil in the tank. Money is not going into purchases of goods and services, thus increasing the demand for extra securities, reducing interest rates."

Ronald J. Talley, vice president director of research of the economics department, Mellon Bank, Pittsburgh, sees federal funds declining modestly to 6.25% by the end of this year, influenced by a sluggish GNP, a "well-contained inflation rate at a 3% trend, low by standards of the past 15 years," and the tax bill, "broadly conducive to lowering interest rates, in making borrowing costs after taxes higher and the saving reward greater," he said.

"Also, expectations for growth abroad will allow room for easing monetary policy."

Massive portfolio restructuring, added to still declining GNP and inflation, also will decrease rates, will continue forcing investors to sell hard tangible assets and buy stocks and securities, according to Mr. Rutledge.

Some economists, however, believe the GNP and interest rates will climb slightly.

"Recently the rates are moving downward because the economy is not showing significant growth," said Joseph T. Keating, vice president and director of fixed income at American National Bank and Trust Co., Chicago. "But I do anticipate a rise in the GNP through the year, which will apply modest upward pressure on (12-month) rates."

Mr. Keffer concurred, predicting a basic rise in rates with economic growth from 50 to 150 basis points higher than today in the second half of this year through next year.

"We are far from a recession," he said. "The Fed's cutting rates is limited in the long term. By next year, the increased demand for credit will also put pressure on interest rates."

Assuming the enactment of a tax reform package that closely resembles the one passed by the Senate, rather than the House's version, most of the economists surveyed and some money managers said dividend capture programs may still continue to be attractive over taxable short-term investments, for corporations in the higher tax brackets, even though the highest tax bracket would fall to 27% from 46%.

Some experts suggested dividends may increase as taxable investors in general find the tax advantages of capital gains eliminated by the new law and demand more returns in dividends that the lower tax rates make more attractive.

Currently, corporations may exclude 85% of the dividends from their income for tax reporting purposes, provided they hold the securities for at least 49 days.

Under tax proposals, the exclusion might be less generous, though no final proposal has been adopted. As a result, the reduced exclusion and the lower tax rate could make dividends less attractive to corporations, some analysts said.

One corporate investor with taxable working cash in dividend programs was indifferent to effects of tax revision on the investment.

William C. Glynn, senior vice president-finance and chief financial officer, MDU Resources Group Inc., Bismarck, N.D., said the tax proposals wouldn't have an effect on the investment. As the legislation is proposed, he noted a cut in the firm's general tax rate would be offset by its loss of investment tax credits.

A treasury executive for another corporate investor, a major consumer products company, said the tax proposal, although somewhat harmful, would still keep dividends relatively attractive compared to short-term instruments.

She said the proposed reduction of the exclusion to 80% from 85% would blemish the dividends' attractiveness and could narrow the spread.

"Dividend captures, compared to taxable investments, are relatively better but not in an absolute sense quite as attractive as they once were before the reform," she said.

She said her firm doesn't plan to change its dividend investment program. Its returns would still be attractive compared to what it would receive in other taxable investments.

Peter Dodge, president of Corporate Preferred Fund, W.P. Carey & Co., New York, said, "There has been some recent fence-sitting, but investors will be staying with dividend funds and expanding there, getting into municipals and preferred stocks with a tax advantage."

Bryan Ganz, chairman of Paramount Capital Group Inc., New York, said, "Dividend captures will lose some competitive advantage, but with the large margin now, dividend capture will still turn out to be a better vehicle for corporate cash after the law is passed."

He added he does not anticipate a great spread between dividend captures and exclusively taxable instruments.

Mr. Ganz said he expects rates on short-term municipal issues to decline after tax reform because municipalities will increase the supply of long-term issues while cutting back the supply of short-term issues.

An investment official from Drexel Burnham Lambert Inc., New York, who asked that his name not be used, predicts that for corporations investing their taxable working cash, "dividends will still be better than the Treasuries and CDs (on an after-tax basis). They would receive an after-tax return of 8% instead of 10%, but that's still better than 3% on Treasuries," he suggested.

He added the spread, between dividend programs and taxable short-term investments, would narrow 100 to 150 basis points, making dividend programs still worthwhile. ■

Economic forecasts

	One-year Treasury bills rate as of			Growth over next 12 mos.	
	Oct.	Jan.	April '87	Inflation[1]	GNP[2]
Michael Drury A. Gary Shilling & Co.	6 %	5.5 %	5.5 %	1 %	2 %
Robert Genetski Harris Trust & Savings Bank	5.4	5.1	5	2	4
Joseph T. Keating American National Bank	6.44	6.9	7.45	2.9	2.7
Joel Keffer Irving Trust Co.	—	—	—	3.5	2.5
Richard S. Peterson Continental Illinois	—	—	—	2	—
John Rutledge Claremont Economic Inst.	5.7	5	4.6	2	2.5
Laurence Siegel Ibbotson & Associates	6.33	6.41	6.19	—	—
Wayne Stevens Duff & Phelps Inc.	5.9	5.6	—	1.8	2.5
Ronald J. Tally Mellon Bank	—	—	—	3	3
Averages	**5.96**	**5.75**	**5.75**	**2.28**	**2.74**

[1] Consumer price index

[2] Gross national product, adjusted for inflation

Firms slow to pay dividends electronically

By Barry B. Burr

Only a few corporations now electronically deposit dividend checks directly into shareholders' bank accounts, despite a general perception the transfers might save on check processing and administrative costs.

Several corporations, however, are considering offering such a form of dividend payments, according to executives interviewed.

Nearly all the executives noted that moving to electronic funds transfer would entail the probable loss of the traditional float from shareholders who delay cashing their checks, which corporations

Consolidated Edison Co. of New York in 1981 apparently became the first corporation to offer shareholders such a service, according to Roger Hampsmire, director of treasury operations.

International Business Machines Corp., Armonk, N.Y., began offering electronic deposits of dividends in the third quarter of last year, said Peter Descovich, manager of stockholder records.

"We're on the cutting edge of doing this," said William Clifford, financial analyst, Consolidated Edison.

The number of shareholders at both companies receiving dividends through electronic funds system, mainly because most shareholders still prefer receiving dividend checks in the mail.

In all, about 2% of large corporations paid dividends electronically last year, according to Greenwich Associates, Greenwich, Conn.

Among companies considering electronic dividend payments is New York State Electric & Gas Corp., Ithaca, N.Y.

"We're studying that at the moment," said Michael Ellis, cash manager.

Northern States Power Co., Minneapolis, has been canvassing shareholders about such a service, while Phillips Petroleum Corp., Bartlesville, Okla., has considered

holders, a survey by Harris Trust and Savings Bank, Chicago, found widespread interest among individuals in electronic dividends.

Of the 660 responses to the survey of subscribers to its investment advisory newsletter, Harris found 45% of the Americans and 61% of the Canadians favored electronic dividend payments, according to Jeffrey C. Nicholson, a vice president at the bank.

Mr. Nicholson noted implementing such a system depends on acceptance by the chief corporate executives and the board of directors as well as shareholders.

"It's not something that a corporate cash manager can decide," he said.

choose a paper-based direct deposit, by which dividend checks are mailed directly to banks, instead of to shareholders' homes.

About 9,000 of Consolidated Edison's 180,000 shareholders take advantage of electronic dividend payments, said Thomas Lienhard, manager of investor services.

He had no breakdown on saving, saying the cost was probably about the same as mailing checks.

"The money savings are slight given the relatively low rate of participation," said Mr. Hampsmire. "But we hope to get more people participating and save money over time."

"There will be a slight savings

Assets outpace . . .

Continued from page 3

$39 billion surplus reported in 1984.

Not surprisingly, the largest surpluses most often belonged to the largest companies:

- IBM Corp., Armonk, N.Y., had the highest surplus — $7.78 billion, a 76% increase from the $4.42 billion reported in 1984.
- AT&T was second, reporting surplus assets of $6.05 billion, an increase of 10.2% from 1984's $5.49 billion.
- General Electric Co., Fairfield, Conn., was third, with a $5.96 billion surplus, up 77.3% from 1984's $3.36 billion.
- Exxon, with surplus assets totaling $3.886 billion, was fourth. That was an increase of 80.7% from $2.15 billion in 1984.
- Du Pont was fifth, with $2.73 billion. That reflected no change from the surplus reported in 1984.

Only eight of the 100 companies were underfunded in 1985, vs. seven in 1984. Dana Corp., Toledo, Ohio, with an unfunded liability of $11 million, was new to the list of unfunded plans, as well as to the top 100 survey.

The five largest unfunded liabilities were reported by two steelmakers and three automakers:

- Bethlehem Steel Corp., Bethlehem, Pa., reported the largest unfunded liability — $1.033 billion. That was a growth of 21% from 1984's deficit of $853 million.
- Chrysler Corp., Detroit, was second, with an unfunded liability of $581.5 million, a 68.6% increase from 1984's $345 million.
- American Motors Corp., Southfield, Mich., shrank its unfunded liability 31% to $243.6 million, from the previous year's $354 million.
- The LTV Corp., Dallas, reported an unfunded liability of $238.4 million, a 1% increase from the $236 million unfunded liability reported in 1984.
- Firestone Tire & Rubber Co., Akron, Ohio, had an unfunded liability of $76 million, a drop of almost 120% from its reported overfunding of $167.5 million in 1984. In 1985, the company recouped more than $250 million in excess assets after terminating its domestic defined benefit pension plan for salaried employees.

In two of the Big Three automobile manufacturers (Ford Motor Co. and General Motors Corp.), asset growth outpaced liability growth. Both companies reported the largest changes in vested funding status.

At Ford, Dearborn, Mich., assets grew 24%, while vested liabilities grew only 5% during 1985.

Ford's assets rose to $10.62 billion in 1985 from $8.55 billion a year earlier. Its vested benefits grew to $9.18 billion in 1985 from $8.77 billion 1984. As a result, the company reported a pension surplus amounting to 12% of its total net worth in 1985. In 1984, it reported a funding deficit of 2.2% of net worth.

Ford's vested funding status changed dramatically in 1985, moving to a surplus of $1.44 billion from an unfunded liability of $220 million in 1984.

Marc Twinney, pension manager, said the jump was caused by an unusual item in 1984's figures.

Because of amendments made to the pension plan resulting from 1984 labor settlements and additions to non-union plans, roughly $1 billion in liabilities was added to the 1984 report. Ford accounted for all $1 billion in 1984, instead of spreading out the liabilities over three years, as is commonly done by automakers.

Also, Mr. Twinney noted the fund, which is fully invested, appreciated roughly 26% in last year's strong market.

Pension assets at General Motors, Detroit, also grew faster than vested liabilities. GM's assets increased 31% in 1985, to about $25.5 billion from about $19.5 billion in 1984. Vested benefits rose 16% during 1985, to about $23.4 billion from about $20.2 billion the year before.

GM's pension surplus assets comprised 8.2% of the company's net worth in 1985, vs. a 3.2% funding deficit in 1984.

Like Ford, GM also saw a dramatic increase in its vested funding status in 1985. The fund's surplus increased more than 14 times over in 1985, to $2.117 billion from $149 million in 1984.

For the Chrysler pension fund, the opposite was true.

Chrysler's pension assets grew 16% during 1985, to $2.92 billion from $2.51 billion in 1984.

Assets reported by Chrysler were footnoted as assets the company owed to the plan but had not yet contributed.

"The fund's policy is to contribute at the highest level possible under Internal Revenue Service limits," said Russell Flynn, manager-pension fund administration.

"We do, however, end up with some past service liabilities that we are not permitted to fund in a one-year period," he added. "Instead, we spread them over a 10-year period.

"It's a liability, totaling $161.8 million, that's recognized on the balance sheet for which we haven't received the money yet."

Vested liabilities at Chrysler rose roughly 21% during 1985, to $3.5 billion from about $2.86 billion in 1984. As a result, Chrysler's funding deficit grew to 13.8% of net worth in 1985, from a deficit of 10.4% of net worth in 1984.

That pension fund's vested funding status remained more level: In 1985, the Chrysler plan was underfunded by $581.5 million, vs. $344 million in 1984.

Despite the increase in the underfunded status, Mr. Flynn pointed out that the negative position was reduced considerably between 1983 and 1984.

Chrysler dedicated $1.1 billion in plan assets during 1984, which reduced the plan's underfunding to about $345 million from about $947 million in 1983, he said.

"But in 1985, because of labor negotiations, which resulted in additional benefits, the unfunded status grew," Mr. Flynn said. ■

Harvard . . .

Continued from page 3

to limit its indexed investments to 25% of its equity assets — although the index fund itself is designed to beat the S&P bogey.

Harvard invests about 65% of its assets, or $2.4 billion, in equities.

The endowment's index fund has evolved significantly during the past few years. When Harvard started exploring index funds in 1983, it created three varieties of funds: a fund tracking the S&P 500; a fund investing in S&P 500 stock index futures; and a skewed index.

Since then, fund officials have blended the indexes into one product that might invest in some 175 stocks, futures or a combination.

In addition, fund officials can weight the fund according to their outlook for the market. For example, they can tilt the index fund toward larger capitalization stocks by beefing up with S&P 500 stocks. Alternatively, they could shift the bias to include smaller-cap stocks by investing in Value Line stocks or futures.

Computer-enhanced products allow fund officials to direct the fund in a variety of avenues, for example, by using a yield tilt.

The fund is "actively managed but not in a sense of selling a stock," Mr. Cabot said. "I think it's another misnomer in the industry to think of these (index funds) as passively managed funds."

As opposed to a traditional index fund, which is designed to mirror a specific market benchmark, Harvard's fund is designed to provide a premium on the return offered by a straight S&P 500 fund, Mr. Cabot said.

In addition, the fund provides added flexibility to the endowment, enabling managers to boost or decrease risk at will to the overall portfolio, he said.

Besides providing an equity core, the fund also allows Harvard to market time "on the margin," Mr. Cabot said. Using the index in either an up or a down market is easier than investing a listed group of securities to catch the broader trend of the market, he added.

In addition, investing in an index fund is safer when the market is giving mixed signals as to its direction, he said.

"To the degree that (portfolio managers) have clarity of thought, you go buy individual securities," he said. When the market outlook is not clear, one retreats to the index.

Another function for the index fund is to help train new portfolio managers. "We have some younger investment managers and we don't just give them a pot of money on Day One," Mr. Cabot said. Instead, the managers draw off the index fund.

Hot firms . . .

Continued from page 2

aging small-capitalization stocks.

First Chicago and Lazard Freres each had one account reported in addition to the California Public Employees' account. The San Francisco City and County Employees' Retirement System hired First Chicago to run $50 million in non-U.S. fixed income, while the International Union of Electrical Technical Salaried Marine Workers Pension Fund, Bloomfield, N.J., hired Lazard Freres to run $43 million in a balanced account.

Rounding out the top 10 were Harris Trust and Savings Bank, Chicago; Lehman Management Co., New York; and Wells Fargo Investment Advisors, San Francisco.

Harris Trust won a $200 million short-term investment account for the Chicago Transit Authority pension fund and a $10 million convertible securities account for the Mack Trucks Inc., pension fund, Allentown, Pa.

Lehman's new accounts were a $140 million bond index fund for the Mississippi Public Employees' Retirement System, Jackson, and a $50 million balanced account for the Major League Baseball Players' fund.

Wells Fargo won assignments to run index funds for the Georgia-Pacific Corp. pension and profit-sharing funds, Atlanta; the Nevada Public Employees' system; and the New York City Teachers' Variable Fund.

Another firm that did well in the second quarter was Duff & Phelps Investment Management Co., Chicago. Duff & Phelps' relationships with the $795 million Arizona Public Safety Personnel Retirement System and the $57 million Arizona Elected Officials and Judges Retirement Fund were upgraded to near-discretionary from advisory. (Because the accounts are not fully discretionary, Duff & Phelps was not included in the top rankings.)

accounts reported in the quarter tended to win smaller amounts of money to manage. Lowe, Brockenbrough, Tierney & Tattersall, Richmond, Va., had five new accounts, with three of the accounts totaling $45 million and the size of two others undisclosed.

Trammell Crow Equity Partners, a New York-based real estate fund that invests in hard-to-sell properties, also drew five pension fund investors, with three committing a total of $65 million and the commitments from the other two undisclosed.

Six investment firms had four new accounts reported in the quarter. Dimensional, the leader in assets gained, was among them.

Firms that lost large accounts during the quarter included Batterymarch Financial Management, Boston, which had a $212 million equity account terminated by the Illinois Municipal Retirement Fund. Fund officials said they made the move because of poor performance by Batterymarch.

Criterion Investment Management Co., Houston, had its equity allocation from the Nevada Public Employees' system reduced to about $250 million from nearly $600 million, as the Nevada fund rebalanced its equity lineup. ■

Most new accounts*
2nd quarter 1986

Firm	New accounts
Lowe, Brockenbrough, Tierney & Tattersall	5
Trammell Crow Equity Partners	5
Bear, Stearns Asset Management	4
Mount Vernon Associates	4
Dimensional Fund Advisors	4
Prudential Asset Management	4
State Street Bank and Trust Co.	4

* As reported in *Pensions & Investment Age*

Most new assets*
2nd quarter 1986

Firm	($ mil.)
Dimensional Fund Advisors	422 to 822
First Chicago Investment Advisors	150 to 550
Lazard Freres Asset Management	143 to 543
Atalanta / Sosnoff Capital Management	100 to 500
Fidelity Bank	100 to 500
Geewax Terker & Co.	100 to 500
TSA Capital Management	100 to 500
Harris Trust and Savings Bank	210
Lehman Management Co.	190
Wells Fargo Investment Advisors	161.5

* As reported in *Pensions & Investment Age*

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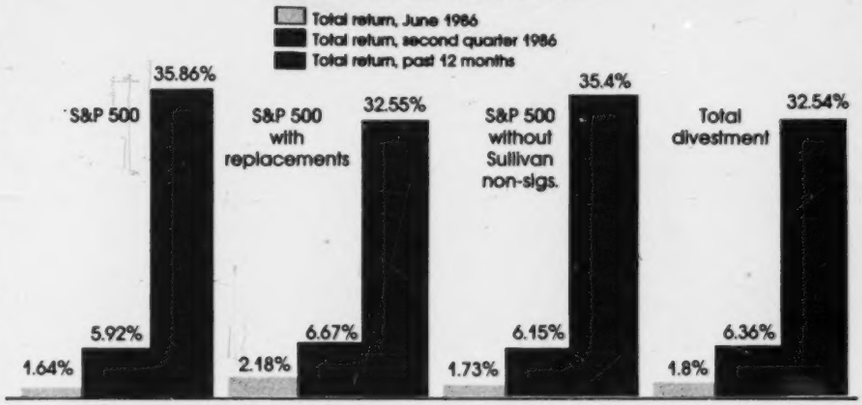
Statistically speaking

The Statistically Speaking page offers an at-a-glance look at statistics for the latest quarter.

The Wilshire South Africa Free Index, Mercer-Meidinger bullet GIC data, First Chicago's MMI and the Russell 3000 returns will appear regularly.

Other data will be used as time and space allow.

South Africa Free Index



Source: Wilshire Associates, Santa Monica, Calif.

S&P 500 with replacements: replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories**: excludes 20 companies, no replacements. **Total divestment**: eliminates all companies with South Africa involvement, no replacements.

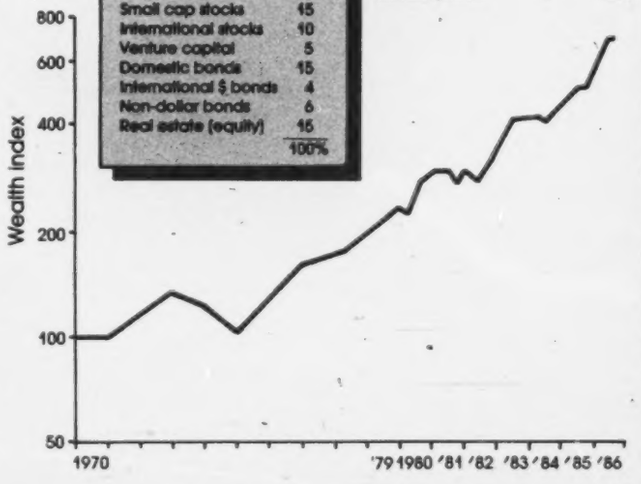
Multiple Markets Index

1970 through 1979 data reflect year-end figure

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of nine asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

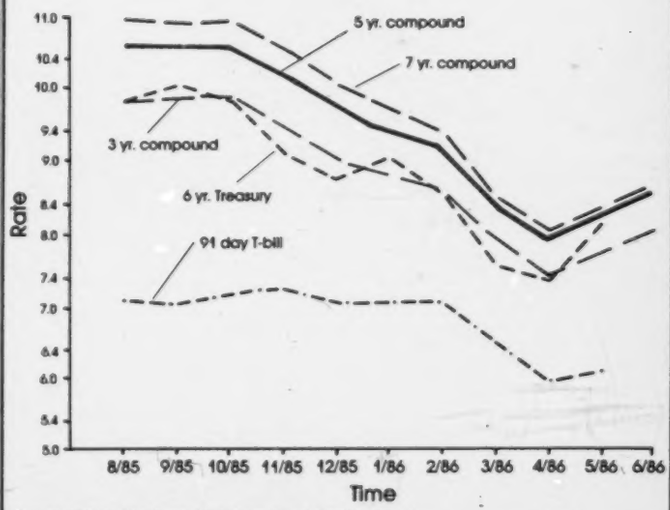
	Weights
Large cap stocks	30%
Small cap stocks	15
International stocks	10
Venture capital	5
Domestic bonds	15
International $ bonds	4
Non-dollar bonds	6
Real estate (equity)	15
	100%

Five-year annualized return 18.1%
One-year return 34.4%
Lastest quarter 5.4%



Source: First Chicago Investment Advisors, Chicago 12/31/69 =100 Data through 6/30/86

William M. Mercer-Meidinger Inc. Summary of average bullet GIC data vs. market yields



Source: William M. Mercer-Meidinger Inc., Louisville, Ky.

Second quarter 1986 returns

	Russell 3000	Russell 1000	Russell 1000 by market capitalization				Russell 2000
			Large	Medium/large	Medium	Medium/small	
Financial services	2.8%	2.3%	−6.2%	−3.0%	4.2%	9.0%	8.6%
Utilities	7.1	7.1	13.2	−0.5	6.6	8.3	6.6
Technology	0.4	0.4	0.9	−0.9	−1.8	3.4	0.0
Basic industry	0.5	0.3	5.7	−0.8	−0.6	−0.8	1.7
Integrated oils	7.1	7.1	8.2	3.9	−0.6	4.7	−4.9
Other energy	5.7	6.2	15.8	3.3	4.4	11.2	3.3
Consumer staples	15.2	15.5	8.6	18.1	9.7	9.2	9.5
Consumer discretionary	11.9	12.4	18.6	12.2	15.5	13.5	8.8
Health care	17.0	17.6	−6.2	12.7	26.3	17.8	11.1
Auto and transportation	−4.0	−4.2	0.0	−7.5	0.9	1.3	−1.4
Total	5.9	6.0	7.3	4.1	5.3	7.5	4.8

Source: Frank Russell Co., Tacoma, Wash.

Pensions & Investment Age

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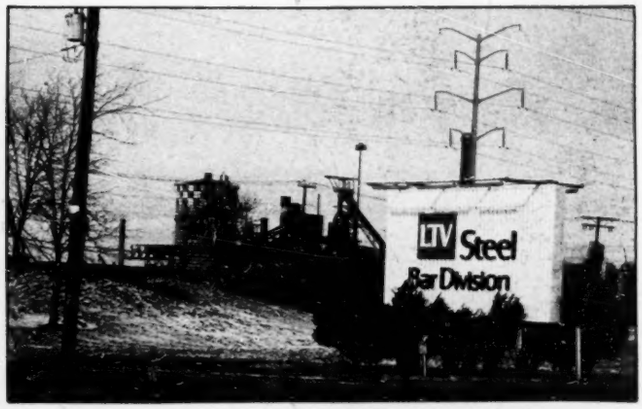

The LTV Corp. attempted to terminate health-care benefits to Steelworkers who retired from this Chicago plant and others.

Firms face $100 billion retiree health care bill

By Barry B. Burr

The LTV Corp.'s attempt to terminate its retirees' health-care benefits underscores the vast unfunded liabilities — possibly more than $100 billion — facing companies for post-employment medical costs.

It also raises a possible parallel to the problems and distress that led to enactment of the Employee Retirement Income Security Act.

LTV's troubles are the latest in a series of recent events giving the costs more attention:

• The Department of Labor, noting pre-funding is rare among corporations, estimated in a study released in May that the present value of accrued liabilities for retiree health care benefits was $98 billion in 1983.

• The Financial Accounting Standards Board's emerging issues task force released two issue summaries on retiree health costs, opening formal discussion on accrual and disclosure of the benefits.

• As an unreported liability,

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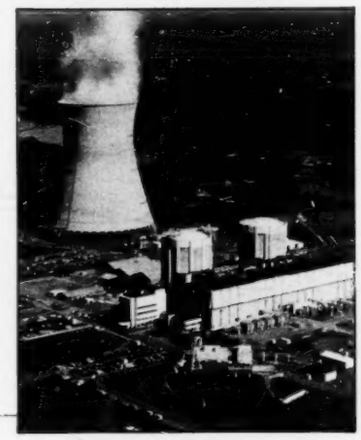
Inside:



CASH MANAGEMENT: Arkansas Power & Light Co., which runs this nuclear plant in Russellville, might set up a separate trust to handle money for decommissioning its nuclear units, while other utilities already have such funds — page 43.

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INTERNATIONAL: U.S. tax-exempt assets invested abroad rose 105% during the 12 months ended March 31, based in part on the strong overseas stock market — special section, page 15. Profiles of 77 international money managers — page 16.

USX delays refinancing

Moody's rating review deals steelmaker another blow

By Brad Rudin

PITTSBURGH — USX Corp., wounded because of low oil and steel prices and put under a cloud by The LTV Corp.'s bankruptcy filing, took another blow when an unfavorable credit-rating report forced the company to suspend plans to refinance $250 million of 12.5% debt with oil-indexed notes.

That issue, managed by The First Boston Corp., was part of a $2.9 billion refinancing plan designed to trim interest payments by $125 million annually for the next seven years. (About $1.3 billion in debt from the Marathon Oil Co. acquisition already has been refinanced.)

Refinancing the balance — about $1.5 billion — has been complicated by the unfavorable credit report. A shelf registration for the refinancing has been filed with the Securities and Exchange Commission.

Moody's Investors Service, New York, downgraded USX's commercial paper to Prime-3 from Prime-2 late last month. The corporation's long-term debt has been "placed under review for possible downgrade," the rating agency announced.

That report on USX — formerly United States Steel Corp. — prompted the decision to indefinitely postpone sale of the oil-indexed notes, said David C. Batten, a managing director at First Boston.

Moody's announcement "was a surprise to the company and a surprise to us, and so we'll have to wait and see what happens," Mr. Batten said.

Robert M. Hernandez, the company's vice president and treasurer, was unavailable for comment on the suspended debt issue. A USX spokesman said company officials expect to return to the market "when conditions are favorable, but there's no timetable."

Wall Street experts expect the notes eventually will be sold, but at a greater expense to USX.

"Certainly they will have access to the capital markets," said Robert S. Waill, a fixed-income analyst at L.F. Rothschild, Unterberg, Towbin. "There are many weaker credits with access to the markets."

Corporate finance

James Alexander, an investment banker at Drexel Burnham Lambert Inc., said the size and age of the company will allow it to sell debt despite recent setbacks. The demand for high-yield securities remains strong, he said.

Other observers disagreed.

"This changes things a bit," said Charles A. Bradford, a steel analyst at Merrill Lynch, Pierce, Fenner & Smith Inc. "I don't know if they will be able to sell as much commercial paper with the lower rating," he said.

Selling assets to raise cash will be hard for USX, Mr. Bradford said. "The easiest things U.S. Steel had to sell have already been sold."

But Robert A. Hageman, a steel analyst at Kidder, Peabody & Co., said USX might have to sell more assets more quickly.

"If the market is not closed, but let's say more difficult for them, while they have been on a major asset sale program in the last several years, this may have to be accelerated somewhat," Mr. Hageman said.

"With what's going on in the oil market as well as steel, they may have to readjust — which they already have since the beginning of the year — their capital expenditures, which have come down significantly as oil and steel have been under pressure. And that still has a lot of room to go," Mr. Hageman said.

USX's position in the capital markets will become more clear in a few weeks when Moody's completes its evaluation of the company's credit.

Under review are the Baa 2 rating on USX's senior debt, Baa 3 rating on its subordinated debt, Baa 3 on preferred stock and Ba 1 on preference stock. The debt of several LTV units also is under review.

A prepared statement by Moody's said "there is a strong likelihood of continued volatility in energy prices at depressed levels, and that the bankruptcy filing of LTV, the nation's second-largest steel producer, has aggravated an already difficult situation in the steel industry, in which USX is the largest competitor."

USX officials, also in a prepared statement, responded, "We are appalled at Moody's unilateral decision to downgrade its rating of USX's commercial paper and to review with negative implications the long-term debt of the corporation and its subsidiaries . . .

"For Moody's to use the recent LTV bankruptcy filing as its reason to downgrade (USX's) com-

Continued on page 51

2 seek OK on incentive fees

By Chuck Paustian

WASHINGTON — Batterymarch Financial Management, Boston, and BDN Advisors, New York, are asking the Department of Labor to approve performance-based fee proposals.

The department is expected to issue advisory opinions — rather than exemptions — on the money managers' proposals in the next two months. The opinions would give pension investment professionals guidance on what types of fee schedules the department would approve, while the exemptions would have applied only to the two firms.

In another development, both the Investment Counsel Association of America Inc., New York, and Wilshire Associates, Santa Monica, Calif., have issued papers providing guidance on performance-based fees.

Corporate pension funds currently cannot implement performance-fee schedules because they would violate prohibited transaction provisions of the Employee Retirement Income Security Act.

David M. Walker, assistant deputy secretary of the department's Pension Welfare Benefits Administration, confirmed the department is leaning toward issuing advisory opinions on the fee proposals.

He said the advisory opinions would indicate the Labor Department's interpretations of ERISA's provisions as they pertain to performance fees.

"While it would be confined to this specific case, it would provide some general guidance to the ERISA community. The advisory opinion has a broader implication than a specific exemption," Mr. Walker said.

Batterymarch's fee proposal is a fulcrum fee arrangement and contains both a floor and ceiling on the fee paid.

Alan J. Strassman, executive vice president of Batterymarch, said the proposal was developed after conversations with some of the firm's clients.

"We went to selected clients who we knew well enough that we thought they would give us honest feedback," he said.

"What we wanted to do is give them a structure where if it's a bad year, they're able to get some of (the fee) back, if you will, through reduced fees; and if it's a good year, we share in the reward."

Now, Batterymarch's fees are 85 basis points for the first $10 million of assets under management; 45 basis points for the next $10 million; 35 basis points for the next $30 million; and 15 basis points for any amount above $50 million.

Under the performance-based fee schedule, the firm's performance would be measured against the return of the Standard & Poor's 500 stock index for a one-year period.

After the one-year period, if Batterymarch's performance surpassed the return of the index by more than 100 basis points, the firm would be entitled to a "bonus" fee, calculated as a percentage of the previous year's fee.

The bonus fee would equal 5% of the prior year's fee for performance 101 to 300 basis points

Continued on page 54

DOL strikes out in court

Grumman trustees win

Appeals court agrees fund suffered no loss in '81

By Brad Rudin

NEW YORK — A federal appeals court has upheld a decision that the Grumman Corp. pension fund suffered no losses when it bought additional company shares at a premium to help stave off a 1981 takeover bid by The LTV Corp.

The decision means the trustees of the plan, including John C. Bierwirth, are not liable for any damages to the fund arising from their breach of fiduciary duty in the purchase of the stock and their failure to tender Grumman stock held by the plan.

The decision also appears to end the Department of Labor's litigation against the trustees. The DOL is unlikely to ask for a Supreme Court review of the ruling, a department official said.

The decision by the 2nd U.S. Circuit Court of Appeals drew fire from critics who say corporate pension trustees will be encouraged to boost a plan's holding of company stock during a takeover battle even if that means they have to pay a higher price.

When LTV made a tender offer for Grumman in 1981, Grumman's pension plan trustees used plan assets to purchase 1,158,000 shares of Grumman stock at an average price of $38.34. Several days before the tender offer, Grumman shares traded at prices ranging from just more than $23.87 to $27.25.

More than a year later, sale of these shares at $47.55 — along with previously held Grumman stock — earned the plan $11.41 a share, net of commissions, or $13,212,780.

Labor Department lawyers, arguing the trustees breached their fiduciary duties, obtained a preliminary injunction in 1982 barring them from trading Grumman stock without court approval.

In granting the injunction, U.S. District Judge Jacob Mishler found the trustees had breached their fiduciary duty.

In addition, the department asked for an order requiring Grumman to pay damages to the pension fund because the stock had been purchased at an inflated price.

Judge Mishler later ruled the fund had suffered no loss from the trustees' actions.

The Labor Department's efforts to have damages paid suffered a death blow when the Court of Appeals upheld the lower court's calculation of the gain received by the pension plan as a result of the stock purchase.

At issue was whether the U.S. District Court for the Eastern District of New York had correctly applied the appellate court's instruction in 1985 to determine loss or gain by compar-

Continued on page 50

Union's mortgages upheld

By Joel Chernoff

ATLANTA — In a ruling that may boost socially oriented investments by union funds, a federal appeals court said it is legal and prudent for a pension fund to invest in below-market-rate home mortgages.

The 3-0 decision by the 11th U.S. Circuit Court of Appeals in Atlanta represents a major setback for the Department of Labor, which has argued mortgages offered at terms below those made available by local banks and thrifts violate the Employee Retirement Income Security Act of 1974.

The issue had been crucial to construction-industry unions, which sought to create jobs for members when interest rates hit record levels in the early 1980s.

The case, which involved litigation filed in 1981 by the Labor Department against trustees of the Local 675 Operating Engineers Pension Trust, Pompano Beach, Fla., has left the government in a quandary, and may cause it to seek review by the U.S. Supreme Court.

The appeals court rejected the government's argument that a pension fund must charge the prevailing rate of interest in making home mortgages. Rather, it found the "reasonable rate" required by the law does not mean the local market's prevailing rate.

"We cannot draw that inference from such an unclear legislative history," the ruling said.

In part, the suit concerned $2 million in below-market-rate mortgages offered to plan participants and beneficiaries in 1980 and 1981. (The department earlier had lost on issues involving the financing and construction of the pension fund and union's office building, and salary expenses paid by the fund.)

The first nine loans were made in May 1980 at rates of 10⅜% or 10¾%, while 31 subsequent loans were offered at an 11% rate. Meanwhile, the rates posted in a Federal Home Loan Bank Board survey of Southern Florida financial institutions were several percentage points higher.

Under the mortgage program, a borrower had to meet eligibility criteria, purchase mortgage insurance if the down payment was less than 20% of the home's appraised value and assign accrued pension benefits to the plan as additional loan security.

The program has been continued, making a total of about $3 million on home loans, according to Dennis Walton, chairman of the $44 million fund's board of trustees and business manager of the union local.

The court said the law requires a fund charge a "reasonable" rate

Continued on page 50

Chicago Pneumatic ESOP case pending

By Brad Rudin

WASHINGTON — The Department of Labor has yet to decide whether it will continue efforts to obtain restitution from the Chicago Pneumatic Tool Co., New York, for transferring 1 million company shares to the employee stock ownership plan during a takeover attempt in March.

Labor Department officials were unwilling to say if or when they would require the company to answer the April complaint they filed.

In April, the Labor Department charged Chicago Pneumatic's ESOP overpaid the company about $10 million for the unregistered treasury shares, which were trading at a premium at the time they were bought because of a takeover attempt by Danaher Corp., Washington.

The department asked the U.S. District Court for the Southern District of New York to remove Thomas P. Latimer, then the president of the company, from his position as sole trustee of the ESOP. The department also asked the court to appoint a receiver for the ESOP.

(Mr. Latimer resigned as trustee about a week after the department filed suit. He was replaced as president after Danaher completed its acquisition of two-thirds of Chicago Pneumatic's stock in June, and installed its own top executives.)

Noting Mr. Latimer had taken a strong stand against the takeover, the court said "his personal interests conflicted with his duty to act in the interests of the plan beneficiaries in deciding whether to tender its shares to Danaher." The shares acquired by the ESOP never were tendered.

Although the court accepted the view that Mr. Latimer's status presented him with a conflict of interests, it rejected contentions of misconduct.

Specifically, the court rejected the Labor Department's argument that Mr. Latimer breached his fiduciary duty by accepting the shares into the plan after the increase in price. The court also rejected the department's request for a receiver.

Commenting on the court's opinion, a Labor Department official said, "I don't think that it necessarily blows us out of the water."

The company's refusal to register the shares has yet to be fully addressed by the court, said the official, who did not want to be identified.

The court's May 13 opinion focused on the department's request to remove Mr. Latimer from his position as the ESOP trustee.

Despite Mr. Latimer's departure, the Labor Department's request for restitution is pending. The department said Mr. Latimer and the company should reimburse the ESOP for "all losses arising from their breaches of fiduciary duty."

Although the Labor Department official said he doesn't "consider the case dead," Thomas McGanney, a lawyer representing Chicago Pneumatic, said the "ball is in (the department's) court."

Mr. McGanney rejected the

Continued on page 50

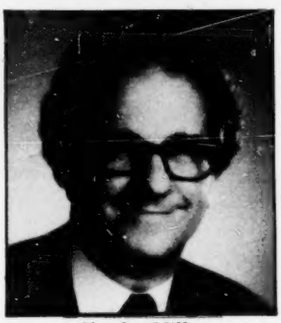
Criterion's chief gains from IPO

By Marci Baker

HOUSTON — The initial public offering for the Criterion Group Inc. will put $10 million to $12 million into Charles Miller's pockets without taking control of the Houston money management firm from its president.

Criterion has filed with the Securities and Exchange Commission for an estimated $38 million IPO. The firm will sell 1.6 million shares of Class A stock through co-managers Goldman, Sachs & Co., New York, and Piper, Jaffray & Hopwood Inc., Minneapolis, at an estimated offering price of $21 to $24 per share, according to the preliminary prospectus.

Mr. Miller is selling 514,000 Class A shares, reducing his stake in the company to 22.8% from 32.1% previously, according to the prospectus.



Charles Miller

But he will retain control because he is keeping all 1.7 million shares of Class B common stock, which will give him about 86% of the voting power on shares outstanding following the public offering. The Class B stock, convertible at any time into Class A shares on a share-for-share basis, offers 20 votes per share on all proxy voting matters, while Class A shares provide for one vote per share.

More than 1 million shares will be those held by existing

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Mapco fund restructures to eliminate contribution

By Brad Rudin

TULSA, Okla. — Mapco Inc. has restructured its $100 million defined benefit pension plan, opting for active equity, fixed income and real estate with the aim of making contributions unnecessary in the immediate future.

Mapco hired Hahn Holland & Grossman, Chicago, and Beutel Goodman Capital Management Ltd., Houston, to each run $35 million equity portfolios. It also gave Hartford, Conn.-based Aetna Life and Casualty Co. $10 million to invest in an open-end commingled real estate fund, while Fiduciary Trust Co. of New York was to manage a $10 million fixed-income portfolio.

The four managers will receive funds that have accumulated in several guaranteed investment contracts. A $10 million slice of the pension fund will remain in a GIC from Aetna Life.

"The company — as a result of mergers, internal growth and the growth of the funds themselves over the last few years — two or three years ago decided that we needed to get more professional in the management of our money, to be more directly invested as opposed to (investing with) insurance companies," said Robert E. Hyer Jr., Mapco's vice president for administration.

With the help of William M. Mercer-Meidinger Asset Planning Inc., Atlanta, Mapco decided on a strategy that would divide the fund's assets into three classes — real estate, fixed income and equity.

Mr. Hyer said Mapco selected a consultant that did not have a money management unit because the company did not want to be faced with a conflict of interests during the search for managers.

InterFirst Bank Dallas remains the master trustee for the defined benefit plan.

Mapco considered 20 management companies in a preliminary screening and narrowed the field to eight in the last phase of the selection process.

Determining the asset allocation plan and selecting the managers took about a year, Mr. Hyer said.

"For the first time we have a professionally managed fund with set objectives and a game plan in place," Mr. Hyer said. "I'm ready to go."

Mapco also announced changes in the company's $20 million profit-sharing plan.

Kemper Financial Services Inc., Chicago, which managed about $13 million for Mapco, was terminated, Mr. Hyer said. Mitchell Hutchins Asset Management Inc., New York, which managed about $6.5 million, now will be responsible for $10 million in growth equities. Cutler & Co. Inc., Medford, Ore., also will manage a $10 million portfolio in high-yield stocks.

The changes in the Mapco pension plan were made in July. Mapco, which owns coal mines, gasoline stations, refining facilities and pipelines, has 3,300 employees and 200 retirees drawing benefits.

The newly structured assets in the fully funded defined benefit plan have been designed to free the company from the necessity of making contributions in the near future. "The plan is basically self-sustaining for the next 10 years," Mr. Hyer said.

Mercer-Meidinger suggested an asset allocation model that will prevent the plan from becoming a drain on company funds when the markets dip. "How can we structure an investment plan that minimizes the possibility they will have a bad year?" was the question before the consultant and the plan sponsor, said Paul V. Troup, a principal at Mercer-Meidinger.

A 5% inflation-adjusted annual return on investment is expected over five years, he said.

"By using rolling five-year periods, we can mathematically calculate whether the guy has a reasonable probability of making the goal. If he does, and his relative performance is good, then he's on track," explained Mr. Troup.

"If he doesn't, and the relative performance is good, it means the goal is too tough. If he doesn't, and the relative performance is

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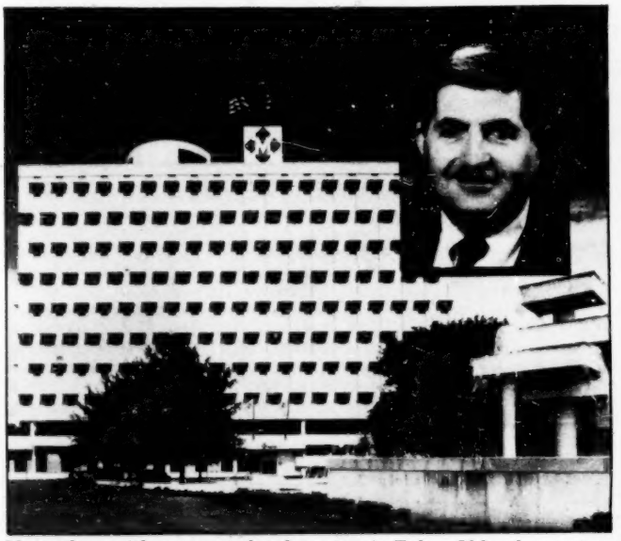


Mapco Inc., with corporate headquarters in Tulsa, Okla., has restructured its $100 million defined benefit plan, according to Robert E. Hyer Jr., (inset) vice president for administration at Mapco.

GTE may join group; 9 sign up

By Joel Chernoff

The Council of Institutional Investors, after a loss of momentum, is once again on the move.

In recent weeks, the group of pension fund investors' membership roll has swelled by nine, with at least two more waiting in the wings. Significantly, one pending application is from the $8 billion GTE Service Corp. pension fund, which will become the council's second corporate fund member, joining U S WEST Inc.

The additions will boost membership to 43 funds, with assets of nearly $200 billion. Most members are public funds, with a sizable minority of union-related funds.

What's more, the council is widening its focus to include topics beyond the scope of corporate governance issues, such as how to better provide fiduciary liability insurance.

Although new issues might enhance the group's appeal to prospective members, corporate governance issues still dominate the agenda. Several members cited the New York Stock Exchange's proposal to allow listed companies to issue common stock with unequal voting rights as a key factor in the council's recent growth surge.

"Multiple voting rights basically is the ultimate shark repellent because it gives management the ability to vote itself in and stay for life," said Ian Lanoff, a former U.S. pension administrator and the council's secretariat.

The council now is developing its strategies to oppose the NYSE proposal, including lobbying the Securities and Exchange Commission and forging alliances with other

Continued on page 49

Interest rates, excise tax play part

Overfunded plan terminations slow

By Chuck Paustian

WASHINGTON — The pace of terminations of overfunded pension funds slowed dramatically during the first half of 1986 because of plummeting interest rates and the threat of a 10% excise tax on surplus assets.

The amount expected to be recovered from completed and pending terminations between May 1980 and June 30, 1986, crawled to $13.76 billion. As of Dec. 31, 1985, the amount expected to be recovered was $11.52 billion.

Pension Benefit Guaranty Corp. data as of July 7 show the number of plans with termination dates during the first six months of 1986 declined 79.5% from the same period in 1985.

Total assets and total reversions from plans terminating during the first six months of 1986 also declined, 74.7% and 73%, respectively, in comparison to the same period last year.

(Those figures do not include the $350 million expected reversion from the termination of a $1.5 billion plan by Goodyear Tire & Rubber Co., Akron, Ohio.

(Since filing with the PBGC, company officials announced they no longer intend to terminate the plan.)

During the first six months of 1986, 40 plans with total assets of $825.4 million filed to recoup $390.9 million.

For the first half of 1985, 196 plans with total assets of about $3.26 billion filed to recover about $1.45 billion.

The decrease in activity comes after two previous years of record-breaking reversions.

For calendar year 1985, companies are expected to recover more than $5.87 billion through completed and pending terminations, breaking the record of more than $3.63 billion expected to be recouped during 1984.

Not included in the PBGC data is Hughes Tool Co., Houston, which intends to file for a spinoff/termination of at least one of its defined benefit plans, *Pensions & Investment Age* has learned.

Hughes Tool executives could not be reached for comment.

According to the company's 1985 annual report, Hughes Tool has $202 million in pension assets and $133 million in total accrued benefits.

Among those recently filing to terminate an overfunded plan was Phelps Memorial Hospital Center, North Tarrytown, N.Y.

Phelps Memorial will terminate a $12.7 million plan and recapture about $5.7 million, said Thomas C. Dowdell, vice president-finance and administrative services.

He said the plan's total assets and amount of surplus have changed since the company originally filed its termination request in April.

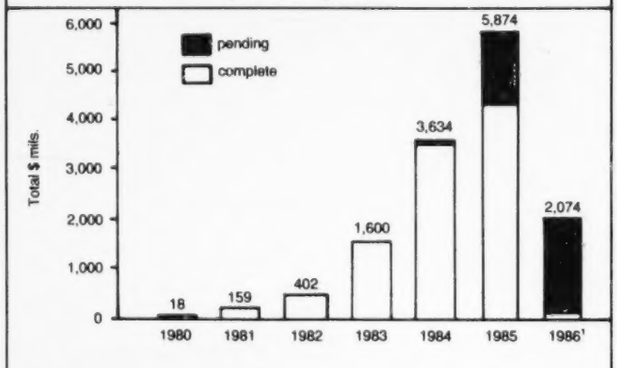
PBGC data show the plan had total assets of $11.4 million with an expected reversion of $5.2 million as of April 1.

"Because of interest rates going down, the increased cost of purchasing annuities has gone up almost proportionately to the growth of our assets," said Mr. Dowdell.

He said Phelps Memorial has not received a notice of sufficiency from the PBGC. The recouped assets will be used for general cor-

Continued on page 49

Reversions from terminated pension plans*



* Aggregate reversion amounts, complete and pending terminations (calendar years 1980-1985)

¹ Filings as of July 7

Source: U.S. House Select Committee on Aging
Tabulations based on Pension Benefit Guaranty Corp. data.

Pension returns underperform market

By Richard J. Gillespie

WASHINGTON — Pension and endowment fund performance has lagged the market and risk-free 91-day Treasury bills, a long-awaited study commissioned by the Department of Labor shows.

Not only did the funds underperform market indexes during the 16-year period from 1968 through 1983, they were substantially outperformed by mutual funds on both an absolute and risk-adjusted basis, the study found.

But the results "do not suggest an opportunity for meaningful public policy innovations," the study said.

The Employee Retirement Income Security Act "has not created substantial difficulties for the management of pension plan assets. Nor does it appear that any expansion of legislation would improve the investment performance of ERISA plans," the study said.

In addition, the study did not come to any conclusions as to why the retirement and endowment funds were eclipsed by mutual funds, leaving such findings to be drawn from a follow-up study being conducted by the Pension Welfare Benefits Administration's chief economist, Richard Ippolito.

Stephen Berkowitz, one of the study's authors, speculated changes in asset allocation and investment strategy and high trading costs stemming from high turnover rates were key factors in pension funds' weak performance.

The sweeping study took researchers Berkowitz, Logue & Associates of Columbia, Md., two years to complete. It examined in detail the performance of 120 private retirement plans, 33 endowments, 36 public plans and 57 mutual funds from 1968 to 1983.

During the 16-year period the mean return on 57 mutual funds

Continued on page 49

PBGC fears more steel plan terminations

By Richard Gillespie and Chuck Paustian

WASHINGTON — The LTV Corp.'s announcement it will terminate one of its pension plans has sparked fears of a landslide of steel industry plan terminations, dumping as much as $3.3 billion in unfunded liabilities on the Pension Benefit Guaranty Corp.

PBGC officials are afraid Dallas-based LTV eventually will terminate all of its underfunded plans, and that competitive pressures could drive other steelmakers to follow suit.

The PBGC could assume as much as $2 billion in unfunded liabilities if LTV terminates all of its plans. Similar actions by other leading steel producers could result in another $1.3 billion in liabilities being dumped in the agency's lap.

Although LTV officials insist only a Republic Steel Corp. plan for salaried workers will be terminated, many analysts say it's inevitable the firm will terminate its other large plans.

If that happens, the PBGC's $1.7 billion deficit would more than double.

Kathleen P. Utgoff, executive director of the PBGC, fears a ripple effect among distressed companies. "All the highly competitive smokestack industries and the airline industry (pose problems), none of them as much as steel."

"All but two of the major steel producers pose significant risks to the PBGC," added Judy Bekelman, a PBGC spokeswoman.

For example, Bethlehem Steel Corp., Bethlehem, Pa., had an unfunded vested liability of $1.03 billion as of Jan. 1, 1985, excluding reported assets of $121 million due in employer contributions and a $738 million credit for plant shutdowns, according to the company's annual report.

Armco Inc., Morristown, N.J., was short $271 million to cover accrued benefits, excluding $106 million in receivables and a $190 million credit for closed operations and early retirement costs, the annual report shows.

But Charles Bradford, vice president of Merrill Lynch Capital Markets, New York, said it's unlikely other steel companies will terminate their plans because recent changes in bankruptcy and pension laws have made it much more difficult to evade labor problems.

Kevin Putt, deputy executive secretary of the PBGC, dismissed that argument. Pension law changes only gave the PBGC an additional 5 cents on the dollar on its claim in bankruptcy situations, he noted, adding "that is not sufficient incentive to keep steel companies out of bankruptcy."

"The fact is because there is an overcapacity in the steel industry, if one company is able to shave a little over $3 off its wage costs, how can another company make that up," Mr. Putt said.

Nevertheless, if LTV does dump the burden for its other plans on the PBGC, the effect on the agency — and its corporate premium payers — would be severe, causing the premium to go as high as $23 per participant, the PBGC estimates.

The premium recently was hiked to $8.50 per participant from $2.60 after a five-year struggle. But the agency's growing deficit — spurred by the $475 million claim from the termination of Wheeling-Pittsburgh Steel Corp.'s pension plans — already merits a $14.50 premium, Ms. Utgoff has stated.

"Something will have to be done to take care of our current deficit. The $8.50 premium will not cover that, especially if LTV terminates," Ms. Utgoff said.

She does not intend to propose a premium increase at this time.She said several other reforms have been suggested, all designed to reduce the liability of the agency. Those proposals include changing the minimum funding standards, implementing risk-related premiums and changing the priority of the pension liability in bankruptcy proceedings.

"The last piece of PBGC legislation, which was passed in COBRA (Consolidated Omnibus Budget Reconciliation Act) and passed in April, was the result of years of negotiations," said Frank B. McArdle, education director at the Employee Benefit Research Institute, Washington.

"Any further reforms of the PBGC would be a difficult piece of legislation to pass," he said.

"Clearly the impact of terminations like LTV, if they do indeed terminate, is going to add pressure for further legislation in the PBGC area."

Ms. Utgoff said if LTV were to terminate its plans, the PBGC would be its largest creditor.

LTV's 25 pension plans cover about 137,000 participants, including 78,000 retirees. (In March, LTV filed to do a spinoff/termination of the $18.5 million Kemtron International, Dallas, pension plan and expects to receive a $12.9 million reversion.)

According to sources, when representatives of LTV and the PBGC met a day after LTV filed for protection under Chapter 11 of the federal Bankruptcy Code, the company's position was it did not have to terminate any other plans.

The Republic Steel plan, however, had been run down to its last few illiquid assets by lump sum payouts, and had to be funded by monthly cash infusions prior to the bankruptcy filing.

Unfunded liabilities for that plan are estimated at $400 million.

An LTV spokesman said the company will meet its August benefit payments to the Republic Steel salaried plan by selling off an annuity.

According to Ms. Utgoff, company officials agreed to keep up payments to the Republic Steel salaried plan, at least until Aug. 1. Then, it might be necessary for the PBGC to seek an involuntary termination "to protect the benefits of retirees," she said, an unusual move for the PBGC.

Industry analysts said it would be virtually impossible for LTV to succeed in its attempt to reorganize under Chapter 11 without ending its other plans. They are puzzled why LTV officials are reluctant to admit that.

"I am not at all clear on whether they can continue to handle these enormous pension obligations on their own," said Steven G. Brooks, senior analyst at Moody's Investors Service Inc., New York.

"I think they will be forced to terminate contributions to the plan. There just isn't enough cash to keep funding those plans," said Peter L. Anker, managing director and senior metals analyst at The First Boston Corp. in New York.

But LTV spokesman Charles M. Palmer insists it would be premature to conclude other LTV pension plans would have to be terminated and unfunded liabilities transferred to the PBGC.

"That unfunded liability will be addressed in the plan of reorganization for LTV, and that typically takes anywhere from 12 months to three years, and LTV is particularly large and complex," he said.

Time already might be running out. On Sept. 15, LTV must pay its $200 million pension fund contribution for 1985, and a similar amount is accruing for 1986. In fact, LTV's pension, welfare and health benefits costs are running at $1 million a day.

Dudley Heer, an analyst with Duff & Phelps Inc. in Chicago, speculated LTV's reluctance to terminate its three other large steel plans (a second Republic Steel plan and two at its Jones & Laughlin steel unit) is the result of a secured funding waiver agreement reached with the Internal Revenue Service and the PBGC.

The agreement, the first secured waiver ever obtained by the PBGC, states termination of any one of the three plans would trigger a clause under which the PBGC could collect stock of LTV Aerospace and Defense Co.

"LTV will rally around aerospace, if only because that is the most viable business they have, and they will fight to protect that going into bankruptcy proceedings," said Joseph V. Battipaglia, an analyst with Gruntal & Co., New York.

LTV estimates the value of LTV Aerospace at between eight and 12 times the $175 million collateral pledged to the PBGC in lieu of its contributions.

But Ms. Utgoff said Shearson Lehman Brothers Inc. had put the aerospace unit's value much lower, in excess of $600 million. Some of the stock also was pledged to some banks under a loan credit guarantee for $250 million, some of which has been paid off. Ms. Utgoff said there was possibly $400 million subject to the PBGC's primary claim.

If the other three steel plans were terminated, the aerospace unit would not cover the total unfunded liability, she said.

Mr. Heer estimates LTV Corp.'s net worth at about $800 million, although the company was losing about $500 million a year in its pre-bankruptcy state, he said. ■

Corrections

- On page 16 of the July 21 issue, the corporate assets of **Firestone Tire & Rubber Co.** should have been $2.528 billion.
- The telephone number for Venture Economics was listed incorrectly in a July 21 datebook item on the firm's annual venture capital forum in Boston, Oct. 9-10. The correct number is (617) 431-8100.

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Opinion

As long as you're divesting . . .

SO MANY PUBLIC PENSION funds, endowments and foundations have decided to divest their portfolios of the stocks of companies doing business in South Africa that it's time to take the divestiture movement further. Such funds should not discriminate in their indignation.

First, concerned funds ought to purge their portfolios of U.S. Treasury obligations. The U.S. government has far greater dealings with South Africa than any corporation. If a fund must divest its portfolio of the stocks of companies doing business in or with South Africa, how can it in good conscience hold Treasury securities?

Some funds also have taken aim at companies doing business in or with Northern Ireland because of discrimination against Catholics there, but there are many other countries worthy of divestiture attention. For example, companies doing business in England should be on the divestiture list because of its role in Northern Ireland.

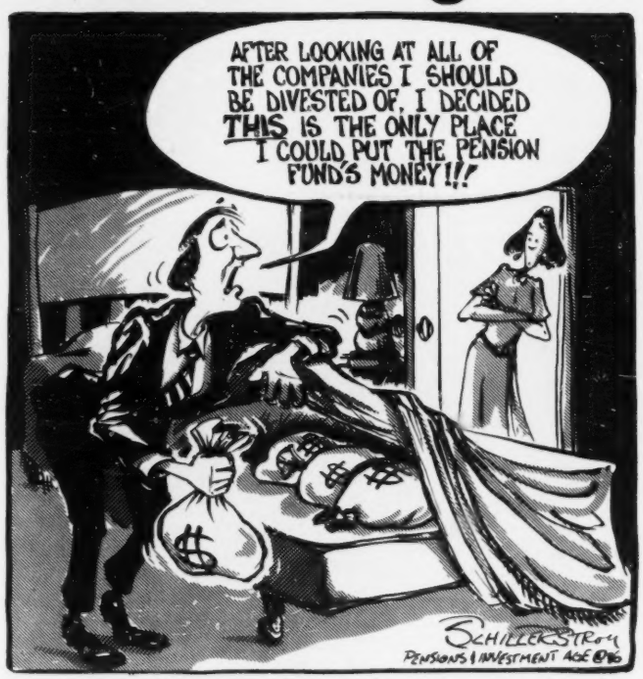
Companies doing business with the Soviet Union should not be in any self-respecting public pension fund or university endowment portfolio, if only because of the invasion of Afghanistan.

Spain should be on the list because, clearly, the Basques have grievances the Spanish government is not adequately addressing.

Similarly, out of the portfolio should come companies doing business with France, which not only blew up the Greenpeace ship Rainbow Warrior, but is resisting the efforts of some of its Pacific colonies to win independence.

Half-a-dozen European countries, including West Germany, should be on the black list because of their treatment of the migrant workers in Europe.

India belongs on the list because of its treatment of its Moslem minority, especially the Sikhs, and because of the continued existence of the caste system; Australia because of its treatment of the aborigines; Malaysia because of its discrimination in law against the local Chinese; Zimbabwe because of the discrimination against the Ndebele; Japan because of its discrimination against its Japanese-born Korean minority; and Israel for religious discrimination and for supplying arms to both South Africa and Iran.



The list could probably go on, but by now most stocks on the New York Stock Exchange with any foreign sales probably have been eliminated.

Tax uncertainty fueling malaise

A MAJOR BUSINESS publication headlined a story about IBM Corp.'s poor results so far this year: "What's wrong with IBM?"

What's wrong with IBM is what's wrong with the whole economy.

The U.S. economy is slowing, and some economists are predicting a possible recession early next year.

Some commentators, and especially some members of Congress, have expressed surprise at this turn of events, but there should be no surprise.

Congress has contributed to the country's economic malaise with its long, drawn out efforts at tax reform.

The statistics on business capital investment so far this year suggest companies are holding off making investment decisions until the tax reform bill is passed and they know what the rules of the game will be.

Now that the consumer has run out of purchasing power, or at least the desire to purchase, and the farmers and the oil service industries are feeling the effects of low prices, the economy needs a boost from investment spending by those industries that are healthy.

But that boost will not come while there is uncertainty about the tax implications of their investment decisions.

The sooner the two houses can settle their differences on tax reform and send a bill to the president, the better for the economy.

Business may not like the final tax bill, but it likes uncertainty even less.

Letters to the editor

Bankers Trust data

To the Editor: Bankers Trust was omitted from the Cash Management Directory published July 21. The bank has a substantial cash management business, as evidenced by the following information.

Our 65 cash management professionals service more than 22% of the "Fortune 1,000."

Bankers Trust's collections services include both manual and automated wholesale lockboxing. We also offer extensive controlled disbursement services, including reports by 10:30 a.m. EST, delayed funding capability and alternative presentment locations. Our lockbox/disbursement studies use the Phoenix Hecht/UAI model.

Our communication services include our own terminal-access balance reporting system, as well as Through the ACH we offer terminal-initiated transactions, depository transfer checks, direct deposit of payroll and pre-authorized debits. We are able to send and receive corporate trade payments through the ACH.

Our extensive international capabilities include letter of credit, cash letter, money transfer, documentary collections and foreign exchange advisory and trading.

Additional services include automated account sweeps, cash letter, zero-balance accounts, multitiered balance accounts, money transfer, payable-through drafts, account reconciliation and a treasury workstation developed by ADS.

Our contact for customers is Albert Bellino, senior vice president-global operating and information services.

Assistant vice president
Bankers Trust Co.
New York

Capital Consultants

To the Editor: Enclosed is the data required for Capital Consultants to be included with money managers not in the May 19 issue.

As of Jan. 1, Capital Consultants Inc., 2300 S.W. First Ave., Portland, Ore. 97201, (503) 241-1200, had $630 million in total assets under management. Of that, $561 million was tax-exempt.

The tax-exempt asset mix was 31% stocks, 33.4% bonds, 8.5% cash, 14.6% equity real estate, 11.9% mortgages and 0.6% mortgage-backed securities.

Capital Consultants has 39 corporate clients; $67 million in mortgages; and $3 million in mortgage-backed securities.

It has equity, fixed-income, balanced and real estate capabilities.

In equities, the focus is on stock selection. In fixed income, the average maturity adjustment is between three and seven years depending on inflation expectation and cyclical credit considerations.

In real estate, Capital Consultants offers clients investments in mortgages and equity-related mortgages and equity positions in quality commercial properties.

Gregory J. Houser, senior vice president, is chief investment officer. John Svicarovich, vice president, is client contact.

John Svicarovich

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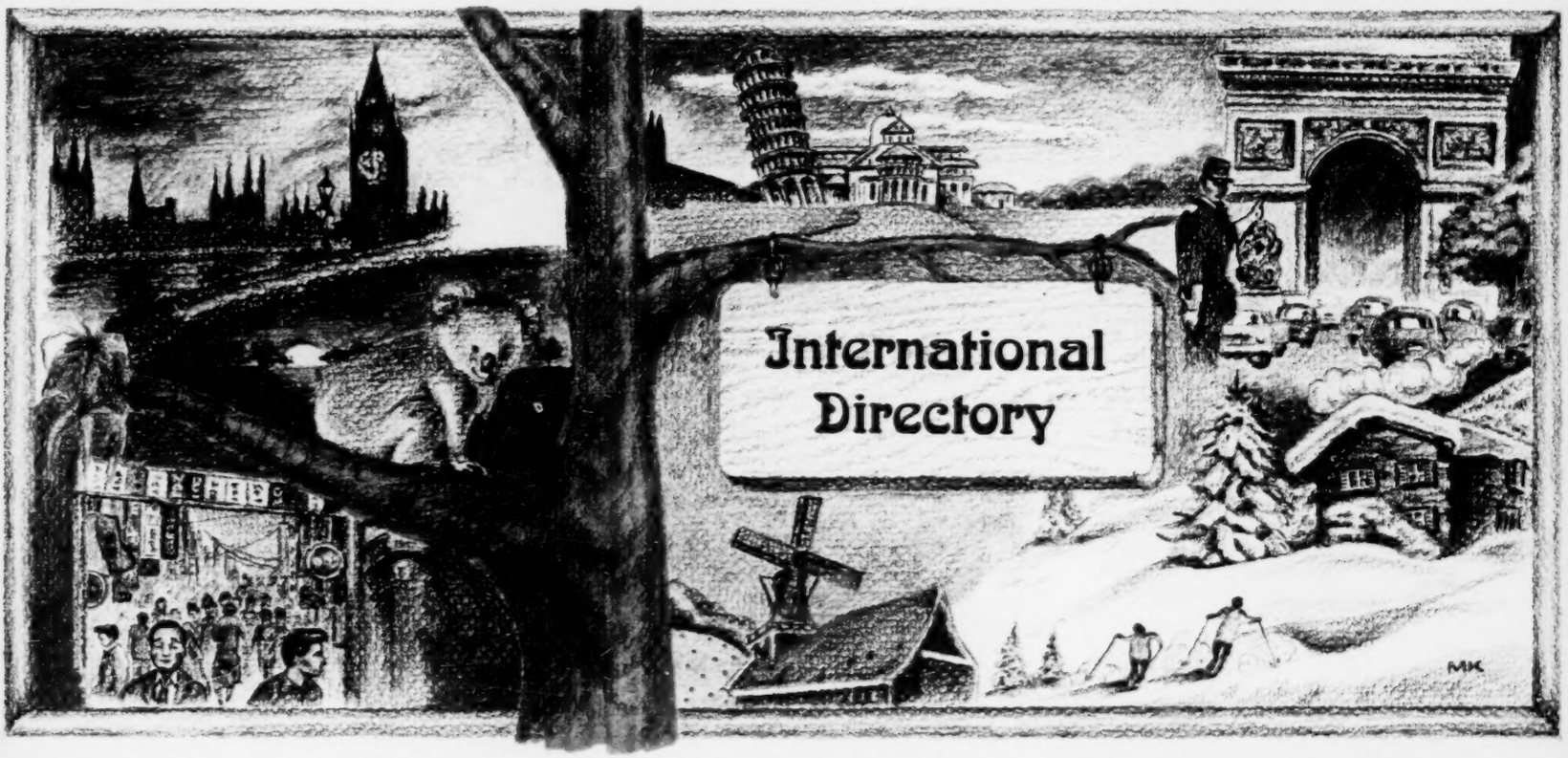

Illustration by Mary Kaskie

Overseas assets rise to $32.6 billion

NEW YORK — Extraordinarily strong overseas stock market performance during the past 12 months was in part responsible for the dramatic increase in overall U.S. pension fund assets invested internationally, according to *Pensions & Investment Age*'s 1986 survey of international and global money managers.

U.S. tax-exempt assets invested abroad rose a stellar 105% during the year ended March 31.

Seventy-seven international investment advisers reported investing $32.6 billion abroad for U.S. tax-exempt clients as of March 31, in comparison with $15.9 billion reported for the year ended March 31, 1985. (The figures exclude assets invested in the United States for global accounts.)

Of this, $27 billion was invested in non-U.S. stocks, $4.3 billion in foreign bond markets and $1.3 billion was in overseas cash equivalents.

Much of the spectacular growth in assets was due to market growth: The Morgan Stanley Europe Australia Far East index was up 85.1% for the year ended March 31. But approximately $3.3 billion, or 19.8% of the total increase in overseas assets, came from the addition of new assets to managers.

The gradual weakening of the U.S. dollar against other currencies also was a culprit in this dramatic increase in assets.

The dollar declined 31.2% against a basket of worldwide currencies weighted by the market capitalization of the EAFE.

It declined 12.6% against the same basket of currencies weighted by the market capitalization of the Morgan Stanley Capital International World index, according to Wendy Beasley, U.S. marketing manager for The World Markets Co. Inc., New York, formerly Wood Mackenzie Computer Services.

"This helped to boost international returns considerably over the year," she said.

The Top 20 international managers saw their U.S. tax-exempt assets invested overseas under management skyrocket 113.5% from their balances of a year earlier.

Assets managed by the Top 20 managers accounted for $26.9 billion of the total, compared to $12.6 billion the year before.

Such a healthy increase in assets for the Top 20 managers sets the tone for the 180-degree turn that has taken place in growth of international investment.

The 1984-'85 survey for overseas investment revealed only a 9% increase in total tax-exempt assets overseas, to $15.9 billion as of March 31, 1985, from $14.6 billion as of Dec. 31, 1983.

Assets under management in international accounts (those invested in non-U.S. markets only) and those in global accounts (those including U.S. markets) more than doubled during the past year, according to the survey.

Roughly $28 billion was invested for U.S. tax-exempt clients in international accounts, compared with $13.2 billion a year earlier.

A bigger surprise, is the increase in popularity of global investment as a style. Managers reported investing $4.5 billion for U.S. tax-exempt clients in global accounts as of March 31, compared with about $2.8 billion a year before.

It should be noted the sum of tax-exempt assets in international accounts and those in global accounts does not equal the total of tax-exempt assets invested overseas. This is because global assets reported did not include assets that were invested in U.S. stocks.

Of the international accounts, the five most heavily weighted equity markets were: Japan, with an average equity weighting of 36.5% in portfolios; the United Kingdom, 12.5%; Germany, 12%; the Netherlands, 9.8%; and France, 8.6%.

Other overseas equity markets that drew international portfolio managers were: Spain, with an average equity weighting of 8.6%; Switzerland, with 8.5%; Belgium, 8%; Italy, 7.8%; and Canada, 7.5%

Of the assets invested globally, the five most heavily weighted equity markets were: the United States, with an average equity weighting of 29.4% in portfolios; Japan, with 21.9%; the United Kingdom, 11.1%; Italy, 8.3%; and Belgium, 8%.

Other markets that were attractive to global portfolio managers were: Germany, with an average equity weighting of 7.5%; Spain, 7.5%; France, 6.6%; and Australia, 6.5%.

Assets in commingled accounts totaled $7.5 billion for the year. That is less than double the $4.2 billion total asset allocated the year before. ■

Plans expand checklist for global custodians

Pension fund executives are asking more of their global custodians these days — better timeliness of reporting, better work in tax reclamation and better policing of accounts.

That certainly is the case at the National Rural Electric Co-Operative, Washington, with $1.6 billion in pension assets.

About 1½ years ago, the NREC moved its $150 million in global custody to State Street Bank and Trust Co., Boston, because "they seemed to have a better handle on the audit trail . . . You really need someone on top of reports to make sure there's some follow-up on things like dividends in different countries and taxation, which should be recouped in a timely fashion," said Peter R. Morris, manager-investments.

Douglas Kelly, director of pension investments at American Can Co., Greenwich, Conn., agreed.

"We look for accuracy in Kelly explained. "Also, we look for timeliness of the reporting, which can be an issue in global custody, and recovery of withholding taxes, which can also be assumed by many global custodians and which are a big item for many plan sponsors."

American Can's $1.1 billion pension fund has about $80 million in assets now held in global custody by Bankers Trust Co., New York.

June Debatin, president of Debatin Associates, Atlanta, an international consultant, said, "The custodian should be good on tax reclamation, and in general should be knowledgeable on other markets and how they differ from our own.

"I don't think that today, there is any great advantage in having someone physically located in London, or New York or Boston. Mellon Bank is a good example. They have their global custody their high level of systems, they are in Pittsburgh."

State Street, Bankers Trust and Mellon are among the five top-tier banks in global custody.

The others are Chase Manhattan Bank, New York, and Northern Trust Co., Chicago.

Although an accurate number of how much in U.S. tax-exempt assets is placed with global custodians is not available, *Pensions & Investment Age* estimates the amount at $50 billion.

Using that figure, Chase is the industry leader with $35 billion as of June 30.

It was just hired by the $4.1 billion Tennessee Consolidated Retirement System as the fund's first global custodian. Officials at the fund would not comment.

In addition, IBM Corp., Stamford, Conn., and another major fund in Stamford, boosted global custody assets with Chase.

IBM officials would not comment.

The new hiring and additional allocations would increase Chase's total to roughly $36 billion.

State Street ranks second among the top five, with $9 billion in U.S. assets in global custody, as of June 30. State Street also markets its custodial services to European companies and has roughly $3 billion in global custody from that marketplace.

Northern Trust is third, with roughly $4.3 billion, and Bankers Trust is fourth, with roughly $2.5 billion.

Mellon officials would not release an amount.

While there are many other banks that provide global custody, most subcontract for services through the first-tier banks, according to industry participants.

"If you go through vendors, you find there aren't too many with other master trustee says they have the capability to do this but most don't; instead they farm it out to subcustodians.

"At the time we hired (State Street), Wachovia Bank & Trust Co. (Winston-Salem, N.C.), was master trustee for our entire pension account. We pulled the international from them because they didn't have enough people or resources to monitor Chase, who was their subcustodian at the time."

Ms. Debatin also raised the question of resources among the lower-tier banks, noting that while the piggybacking of services "isn't bad, it might mean higher fees and less responsiveness for the sponsor, and we always watch out for that."

All banks, whether they are first- or second-tier players, offer to handle international portfolios of their master trustee clients, explained Robert Kay, vice presi-

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a

ABD International Management Corp.

10 E. 53rd St., New York, N.Y. 10022; (212) 319-5020

Total assets managed	$1,500,000,000
Tax-exempt assets managed:	
Total	$1,300,000,000
Invested overseas	$1,300,000,000

ABD International Management Corp., a subsidiary of Dresdner Bank AG Frankfurt and Hypo-Bank AG Munich, managed $1.3 billion in international accounts for 12 U.S. tax-exempt clients as of March 31.

Of the $1.3 billion, $1.227 billion was invested in foreign stocks, $23.4 million in foreign bonds and $49.4 million in cash equivalents.

The equity assets were committed most heavily in Japan, 45%; the United Kingdom, 13%; Germany, 10%; the Netherlands, 5%; and France, 5%.

It also managed $226 million for non-U.S. pension funds.

ABD International's approach to investment management emphasizes an active approach to currencies and stock selection based on industry rotation worldwide and within markets. The currency decision is considered separately from asset allocation and security selection decisions.

Minimum account size for individual management is $15 million.

Analysts or portfolio managers are in Frankfurt, West Germany; New York; Tokyo; Hong Kong; and Singapore.

Net gain for the year ended March 31 was $115 million, all in foreign stocks.

The firm has non-U.S. currency hedging capability, and has been registered with the SEC since 1980.

Assets under management by the parent company and its subsidiaries total $18 billion.

Client contact is Jill B. Jordon.

Aetna MIM Asset Management Ltd.

151 Farmington Ave., YCC1, Hartford, Conn. 06156; (203) 275-3710

Total assets managed	$235,000,000
Tax-exempt assets managed:	
Total	$150,000,000
Invested overseas	$150,000,000

Aetna MIM Asset Management Ltd., a subsidiary of Aetna Life and Casualty Co., managed $150 million in international accounts for 74 U.S. tax-exempt clients as of March 31.

Of that, $145 million was in foreign stocks and $5 million in cash equivalents. All the assets are in a commingled account.

The international equity assets were most heavily committed to Japan, 49.3%; the United Kingdom, 13.5%; Germany, 8%; Italy, 6.3%; and Switzerland, 5.4%.

Aetna MIM's investment philosophy emphasizes maximizing total return through a diversified international or global portfolio, using predetermined risk parameters. An active global and U.S.-driven approach is pursued, including a close study of worldwide economic and monetary trends and a quantitative analysis of individual securities that provides a worldwide comprehensive evaluation of international companies' and markets' relative worth. Aetna MIM adopts a domestic investment strategy that results in the use of a wider range of low p/e, value stocks than that employed by a purely international investor.

The minimum fee is $42,500.

Analysts or portfolio managers are Hartford.

In the year ended March 31, there was a net loss of $32 million.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1983.

Total assets under management by the parent and subsidiaries were $32 billion as of March 31.

Client contact is Christian W. Thwaites, assistant vice president.

AIG Global Investors Inc.

World Financial Center, 200 Liberty St., New York, N.Y. 10281; (212) 266-0400

Total assets managed	$4,000,000,000

AIG Global Investors Inc., a new subsidiary of American International Group, had $4 billion in assets, none tax-exempt, under management as of March 31.

The investment philosophy is global growth, including analyses of population, demographics, national wealth, industrial capacity and production. Country reviews with an investment time horizon of 24 months are conducted to concentrate investments in highly liquid world-class companies that have achieved above-average growth due to a national advantage for an extended period. The base currency is in dollars; currencies are not traded in the short run.

Minimum account size for individual management is $10 million.

The firm is registered with the SEC.

Client contact is Richard J. Hoffman, president, (212) 770-5958 until Sept. 1; after that, (212) 266-0400.

Alexander, Scriver & Associates Inc.

1099 18th St., Suite 2810, Denver, Colo. 80202; (303) 298-1858

Total assets managed	$141,000,000
Tax-exempt assets managed:	
Total	$46,000,000
Invested overseas	$12,000,000

Alexander, Scriver & Associates Inc., a subsidiary of Chemical New York Corp., New York, managed $45.6 million for U.S. tax-exempt clients as of March 31.

The firm invested $11.6 million overseas for one U.S. tax-exempt client as of that date. Of that, $5.89 million was in foreign stocks and $5.71 million in cash equivalents.

The equity assets of the international account were invested most heavily in Japan, 32.7%; Singapore, 4.9%; Hong Kong, 4.8%; Sweden, 4.6%; and Australia, 1.5%.

The firm also managed $33.1 million for foreign pension funds.

Alexander, Scriver & Associates Inc. uses proprietary models to determine country allocation. Then, standardized price and fundamental valuation models are used to identify undervalued securities on a global basis.

Minimum account size for individual management is $1 million.

Analysts or portfolio managers are in London.

The firm has foreign currency hedging capability, and has been registered with the SEC since 1978.

Total assets under management by the parent company and subsidiaries were $13 billion, as of March 31.

The client contact is Gerald H. Scriver, president.

Alliance Capital Management International Inc.

43 Upper Grosvenor St., London, W1X 9PG, England; 011-441-493-9606

Total assets managed	$930,000,000
Tax-exempt assets managed:	
Total	$252,000,000
Invested overseas	$247,000,000

Alliance Capital Management International Inc., a subsidiary of Alliance Capital Management Corp., managed $247 million in non-U.S. markets for 36 U.S. tax-exempt clients, 30 of whom invested in the Alliance Inter Fund.

Of that, $240 million was in foreign stocks and $7 million in tax equivalents.

international accounts, the equity assets of which were committed most heavily to Japan, 28.4%; Germany, 15.6%; the Netherlands, 19.4%; Switzerland, 10.3%; and the United Kingdom, 4.3%.

It also managed $11 million in global accounts, the equity assets of which were committed most heavily to the United States, 42.1%; Japan, 23.4%; Germany, 5.4%; the Netherlands, 8.4%; and Switzerland, 4.2%.

Of the total assets under management, $352 million was for non-U.S. pension funds.

Of the U.S. tax-exempt assets invested abroad, $145 million was in mutual funds.

Alliance takes an active value-added approach with an equity focus. The managers believe they can gain superior returns by applying research for the early recognition of fundamental change. This will lead to the identification of investment opportunity: undervalued markets; undervalued currencies; undervalued industries/economic sectors; and uniquely attractive securities.

Analysts or portfolio managers are in New York and London.

Minimum account size for individual management is $10 million.

Net gain in U.S. tax-exempt international business for the year ended March 31 was $65 million, all of which was in foreign stock.

The firm has non-U.S. currency hedging capability, and has been registered with the SEC since 1971.

Total assets under management by the parent company and its subsidiaries was $26.38 billion as of March 31.

Client contacts are Clinton J. Kendrick, chairman, Alliance Capital Management International, New York, (212) 969-1030; and H. Michael Bean, vice president, Alliance Capital Management Corp., Minneapolis, (612) 332-1544.

American Express Asset Management

30 Monument St., London, EC3R 8LH, England; 011-441-626-9131

Total assets managed	$1,001,000,000
Tax-exempt assets managed:	
Total	$116,000,000
Invested overseas	$108,000,000

American Express Asset Management, a subsidiary of American Express, managed $116 million in U.S. tax-exempt assets as of March 31. Of that, $108 million was invested in non-U.S. markets for three clients.

It managed $67.4 million in international accounts, the equity assets of which were committed most heavily in Japan, 18%; Germany, 16%; the United Kingdom, 15%; Switzerland, 10%; and France, 6%.

It managed $48.6 million in global accounts, the equity assets of which were committed most heavily in the United States, 19%; Japan, 18%; Germany, 12%; the United Kingdom, 11%; and Switzerland, 8%.

Of the total assets managed, $25 million was for foreign pension funds.

Of the U.S. assets invested abroad, $330 million was in mutual funds.

American Express Asset Management identifies "investment themes" and selects attractively valued stocks that will benefit from these themes. Equity selection is a bottom-up process using internally generated valuation screens. The result is concentrated, non-core portfolios.

Minimum account size for individual management is $15 million.

Net gain in U.S. institutional tax-exempt international business for the year ended March 31 was $80 million — $70 million in foreign stocks and $10 million in foreign bonds.

The firm has foreign currency hedging capability and has been registered with the SEC since 1984.

The client contact is Susan Leader in New York at (212) 415-0802.

Pensions & Investment Age's annual institutional brokerage survey is scheduled to appear in the Sept. 29 issue.

International managers ranked by U.S. tax-exempt assets under management for international accounts

	Name	$ mils.
1.	J.P. Morgan Investment Mgmt.	3,673
2.	Capital Guardian Trust Co.	1,992
3.	Fidelity International	1,900
4.	First Chicago Investment	1,846
5.	Morgan Grenfell Investment	1,590
6.	State Street Bank and Trust Co.	1,574
7.	Grantham, Mayo, Van Otterloo	1,561
8.	Rowe Price-Fleming	1,545
9.	ABD International Mgmt.	1,300
10.	Baring International	969
11.	G.T. Capital Mgmt. Inc.	863
12.	Schroder Capital Mgmt.[4]	859
13.	N.M. Rothschild International	654
14.	BA Investment Mgmt.	594
15.	Putnam International Advisors	588
16.	Mellon-Pictet International	531
17.	Bessemer Trust Co.	507
18.	Nomura Capital Mgmt.	494
19.	PCM International	427
20.	Citicorp Investment Mgmt.	419
21.	Daiwa International Capital	390
22.	Warburg Investment Mgmt.[3]	326
23.	Chase Investors Mgmt.	315
24.	Kleinwort Benson International	252
25.	Arnhold & S. Bleichroeder	230
26.	IDS International Inc.	218
27.	Brown Brothers Harriman	178
28.	Kemper-Murray Johnstone	178
29.	Lombard Odier International	176
30.	Capital Mgmt. International	175
31.	Frank Russell Trust Co.[3]	173
32.	Aetna MIM Asset Mgmt. Ltd	150
33.	Julius Baer Investment Mgmt.	124
34.	Scudder, Stevens & Clark	122
35.	Favia Hill & Associates	102
36.	Wellington Mgmt. Co.	102
37.	Batterymarch Financial[4]	101
38.	BEA Associates Inc.	98
39.	BT Investment Mgmt.	98
40.	Martin Currie Inc.	85
41.	Ivory & Sime International	75
42.	PM Portfolio Mgmt.	71
43.	American Express Asset Mgt.	67
44.	Glenmede Trust Co.	50
45.	Fiduciary Trust Co. of N.Y.[1]	45
46.	SBC Portfolio Mgmt.	43
47.	Nikko & Associates Inc.	42
48.	County Investment Mgmt. Ltd.	26
49.	Capital Research & Mgmt.	25
50.	RepublicBank Dallas	23
51.	Wardley Marine International	22
52.	Foreign and Colonial Asset	20
53.	Provident Capital Mgmt.	20
54.	Edinburgh-Wilmington	17
55.	Alexander, Scriver & Associates	12
56.	Barclays De Zoete Wedd	8
57.	Equitable Life Assurance	8
58.	HT Investors Inc.	8
59.	Alliance Capital	2
60.	Baillie Gifford (Overseas)	2
61.	AIG Global Investors Inc.	0
62.	European & Pacific Investment	0
63.	Henderson International Inc.	0
64.	Thomas J. Herzfeld Advisors	0
65.	Kangyo Kakumaru Capital Mgmt.	0
66.	Merrill Lynch Asset Mgmt.	0
67.	NCNB National Bank	0
68.	New Japan Capital Mgmt.	0
69.	Newport Pacific Mgmt.	0
70.	Northern Trust Co.	0
71.	Simms Capital Mgmt.	0
72.	Templeton International	0
73.	Touche Remnant Pension Mgmt.	0
74.	Travelers Asset Mgmt.	0
75.	Van Eck Investments	0
76.	Wells Fargo Investment Advisors	0
77.	Wertheim Philippe	0
	TOTAL	**28,065**

[1] data as of Dec. 31, 1985
[2] includes Peoples National Bank of Washington
[3] includes C&S Investment Advisors Inc.
[4] includes TheVanguard Group

b

International Ltd.

P.O. Box 262, 1 Watling St., London EC4P 4BX; 011-441-634-4000

Total assets managed	$1,133,000,000
Tax-exempt assets managed:	
Total	$598,000,000
Invested overseas	$594,000,000

national Ltd., a subsidiary of BA Investment Management Corp., managed $593.7 million overseas for five U.S. tax-exempt clients as of March 31. Of that, $65.4 million was in foreign stock and $528.3 million in foreign bonds.

The equity assets of the international accounts were committed most heavily to France, 22%; the United Kingdom, 29%; the Netherlands, 10%; Japan, 10%; and Spain, 9%.

The firm manages global accounts for non-U.S., tax-exempt clients, the equity assets of which were committed most heavily to the United States, 29%; France, 20%; the United Kingdom, 16%; the Netherlands, 12%; and Spain, 10%.

Of the U.S. tax-exempt assets invested abroad, $100.8 million was in commingled accounts.

Of the total assets under management, $71 million was for non-U.S. pension funds.

BA Investment Management's investment philosophy follows three steps. Objectives and risk/return parameters are mutually agreed upon. Active, discretionary management with a top-down disciplined team approach is practiced. Consensus expectations, reflected in market valuations, are assessed and compared to in-house analysis, with prospective risk/return profiles developed from alternative scenarios. Global strategy uses common assumptions for fixed and equity that are collectively agreed upon and implemented. Sector and market currency decisions are assessed separately.

Minimum account size for individual management is $5 million.

Net gain for the year ended March 31 was $244.8 million, $7.1 million for foreign stock and $237.7 million for foreign bonds.

The firm has foreign currency hedging capability; it has been registered with the SEC since 1985.

Total assets under management by the parent company and its subsidiaries were $13.2 billion as of March 31.

Client contacts are Francois Dennery at (212) 503-7628 or David Mark and Joy Harper in London at 634-4664 or 634-4688.

Julius Baer Investment Management Inc.

330 Madison Ave., New York, N.Y. 10017; (212) 949-9055

Total assets managed	$190,000,000
Tax-exempt assets managed:	
Total	$143,000,000
Invested overseas	$134,000,000

Julius Baer Investment Management Inc., a subsidiary of Bank Julius Baer & Co. Ltd., Zurich, Switzerland, managed $134 million in overseas accounts for six U.S. tax-exempt clients as of March 31. Of that, $13.4 million was in stocks and $120.6 million in bonds.

As of March 31, the firm had $124 million in international accounts, the equity assets of which were committed most heavily in Japan, 40%; the United Kingdom, 10%; Germany, 20%; Switzerland, 15%; the Netherlands, 5%; and France, 5%

It also had $19 million invested in global accounts, all in bonds.

Julius Baer Investment Management's approach emphasizes very active currency allocation; strong, stable countries; high-quality securities; and an average maturity of three to seven years.

Minimum account size for individual management is $5 million.

Analysts or portfolio managers are in London and Zurich.

The firm had a net gain in U.S. institutional tax-exempt international business for the year ended March 31 of $93 million: $17 million for stock and $76 million for bonds.

The firm has foreign currency hedging capability and has been registered with the SEC since 1983.

The parent company and its subsidiaries managed a total of $7 billion as of March 31.

Client contact is Jay A. Dirnberger.

Baillie Gifford (Overseas)

2 Glenfinlas St., Edinburgh, Scotland EH3 6YY; 011-44-31-225-2581

Total assets managed	$2,000,000,000
Tax-exempt assets managed:	
Total	$100,000,000
Invested overseas	$100,000,000

Baillie Gifford (Overseas), a subsidiary of Baillie Gifford & Co., managed $100 million in international accounts for two tax-exempt U.S. clients. Of that, $95 million was in foreign stocks and $5 million in cash equivalents.

The equity assets were committed most heavily in Japan, 38%; France, 15%, Germany, 14%; the United Kingdom, 13%; and Switzerland, 7%.

The investment approach seeks growth through fundamentally based asset allocation (top down) and stock selection (bottom up).

Minimum account size for separate management is $10 million.

In the year ended March 31, the firm had a net gain in U.S. institutional tax-exempt international business of $55 million, all in foreign stock.

Baillie Gifford has non-U.S. currency hedging capacity, and has been registered with the SEC since 1983.

Assets under management by the parent and subsidiaries as of March 31 totaled $2 billion.

Client contact is Robin Menzies.

Barclays De Zoete Wedd Investment Management

Juxon House, 9.3 St. Paul's Churchyard, London, England; 011-441-248-9155

Total assets managed	$10,200,000,000
Tax-exempt assets managed:	
Total	$80,000,000
Invested overseas	$8,000,000

Barclays De Zoete Wedd Investment Management Ltd., a subsidiary of Barclays PLC, manages $80 million for U.S. tax-exempt clients. Of that, $8 million is invested in foreign stocks for one client.

The equity portion of the $8 million international account was most heavily committed to Japan, 30%; Germany, 20%; the United Kingdom, 20%; France, 15%; and Hong Kong, 5%.

The firm's equity portion of the $72 million in global accounts were most heavily committed to the United States, 90%; Japan, 3%; Germany, 2%; the United Kingdom, 2%; and France, 1.5%.

It also managed $6.9 billion for foreign pension funds as of March 31.

The minimum account size for individual management is $10 million.

The firm follows a global quantitative risk-adjusted strategy employing active asset allocation and passive stock management.

It has foreign currency hedging ability and is registered with the SEC.

Assets of the parent and subsidiaries totaled more than $12 billion as of March 31.

The client contact is Donald Brydon.

Baring International Investment Ltd.

9 Bishopsgate, London, England EC2N 3AQ,; 011-441-623-5264

Total assets managed	$1,000,000,000
Tax-exempt assets managed:	
Total	$969,000,000
Invested overseas	$969,000,000

Baring International Investment Ltd., a subsidiary of Baring International Investment Management Ltd., managed $969 million in international accounts for 12 tax-exempt U.S. clients as of March 31. Of that, $763 million was in stocks and $206 million in bonds.

The equity assets were committed most heavily in Japan, 45%; the United Kingdom, 11%; France, 11%; Germany, 10%; and Switzerland, 7%.

Baring takes an active investment approach, using a top-down perspective to select and weight asset classes and markets. Regional specialists pick stocks based on company fundamentals. They are primarily equity managers, but may purchase short-dated bonds or use cash to enhance returns, and will hedge to protect asset value.

The minimum annual fee is $70,000.

Analysts or portfolio managers are in London, Hong Kong, Tokyo and Seoul, Korea.

There was a net gain of $181 million in U.S. institutional tax-exempt international business. Of that, $6 million was in stocks and $175 million in bonds.

Baring has foreign currency hedging capability and has been registered with the SEC since 1980.

Total assets under management by the parent company and subsidiaries were $13.5 billion as of March 31.

The client contact is John F. McNamara at (617) 357-9074.

Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass. 02114; (617) 973-9300

Total assets managed	$10,984,000,000
Tax-exempt assets managed:	
Total	$9,935,000,000
Invested overseas	$1,008,000,000

Batterymarch Financial Management managed $1.008 billion in overseas markets for 25 U.S. tax-exempt clients as of March 31. Of that, $977.8 million was invested in foreign stocks and $30.2 million in cash equivalents.

The equity assets of the $993 million in international accounts were most heavily committed to Japan, 20%; Australia, 17%; the United Kingdom, 17%; Canada, 10%; and Hong Kong, 8%.

Of the total assets under management, $41 million was for non-U.S. pension funds.

Of the assets invested abroad, $640 million was in mutual funds.

Batterymarch's investment approach is to search for undervalued foreign markets, currencies and stocks. Thirty worldwide brokers are linked to an automated trading system to provide liquidity and cost savings. Batterymarch avoids popular currencies, markets and stocks. The firm forsakes such conventional practices as currency and earnings forecasting.

Minimum account size for individual management is $10 million.

Net gain in U.S. institutional tax-exempt business for the year ended March 31 was $181 million, all in foreign stock.

The firm has non-U.S. currency hedging capability. It has been registered with the SEC since 1969.

The client contact is Alan J. Strassman, trustee.

BEA Associates Inc.

1 Citicorp Center, 153 E. 53rd St., New York, N.Y. 10022; (212) 832-2626

Total assets managed	$6,063,000,000
Tax-exempt assets managed:	
Total	$5,773,000,000
Invested overseas	$98,000,000

BEA Associates manages $5.77 million for U.S. tax-exempt clients, of which $98 million was invested in international equity accounts for three clients as of March 31.

The equity assets were committed most heavily to Japan, 20%; the United Kingdom, 15%; Norway, 11%; Sweden, 9%; and Italy, 9%.

Minimum account size for individual management is $5 million.

The managers are value-oriented, taking a bottom-up approach to stock selection.

The firm has foreign currency hedging capability, and is registered with the SEC.

The client contact is Albert Zesiger.

Bessemer Trust Co.

630 Fifth Ave., New York, N.Y. 10111; (212) 708-9140

Total assets managed	$4,900,000,000
Tax-exempt assets managed:	
Total	$507,000,000
Invested overseas	$101,000,000

Bessemer Trust Co., a subsidiary of The Bessemer Group, had $507 million under management for U.S. institutional tax-exempt clients as of March 31.

Of that, $101 million was invested in international accounts for 13 clients, $95 million in foreign stocks, $3 million in foreign bonds and $3 million in cash equivalents.

The equity assets of the international accounts were most heavily committed to Japan, 38%; Italy, 11%; Germany, 11%; France, 10%; and the United Kingdom, 9%.

It also managed $93 million for non-U.S. pension funds.

Bessemer Trust seeks long-term growth of capital through investment principally in a diversified portfolio of international companies traded in foreign equity markets. Equity investments will be concentrated in those countries exhibiting superior economic growth, a positive currency environment and low market valuations relative to local fixed-income securities and other world equity markets.

The minimum account size for individual management is $3 million.

Bessemer has analysts or portfolio managers in New York and London.

In the year ended March 31, it reported a $73.3 million net gain: $69.6 million for stocks and $3.7 million for bonds. It has foreign currency hedging ability.

The parent and subsidiaries had total assets of $4.9 billion under management as of March 31.

The client contact is Robert C. Elliott.

Arnhold & S. Bleichroeder International

45 Broadway, New York, N.Y. 10006; (212) 943-9200

Total assets managed	$230,000,000
Tax-exempt assets managed:	
Total	$230,000,000
Invested overseas	$230,000,000

Arnhold & S. Bleichroeder International, a subsidiary of Arnhold & S. Bleichroeder Inc., managed $230 million in international accounts for six tax-exempt U.S. clients March 31. Of that, $207 million was in foreign stocks and $23 million in cash equivalents.

The equity assets were committed most heavily to Italy, Australia, France, the United Kingdom and Germany, with about 14.5% committed to each.

Net gain as of March 31 in U.S. institutional tax-exempt international business was $223 million, all of which was for non-U.S. stock.

The firm has foreign currency hedging capability and has been registered with the SEC since 1946.

Total assets under management by the parent company and subsidiaries was $900 million March 31.

The client contact is Frederic C. Reynolds, vice president.

Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005; (212) 483-1818

Total assets managed	$10,300,000,000
Tax-exempt assets managed:	
Total	$5,600,000,000
Invested overseas	$178,000,000

As of March 31, Brown Brothers Harriman & Co. managed $5.6 billion for U.S. tax-exempt clients, of which $178 million was invested in international accounts for eight clients. Of the amount in foreign markets, $157 million was in stocks and $21 million in bonds.

The equity assets were committed most heavily to Japan, 38%; the United Kingdom, 15%; Germany, 11%; Italy, 7%; and Switzerland, 6%.

Brown Brothers Harriman prefers to invest in countries whose growth rates will exceed that of the United States and whose policies are pro-investment. The bank seeks marketability, hedges currency risk when appropriate and manages reserves aggressively.

Minimum account size for individual management is $5 million.

It has analysts or portfolio managers in New York, London and Tokyo.

Net gain in U.S. institutional tax-exempt international business was $7 million: $6.2 million was for foreign stock and $800,000 for foreign bonds.

The bank has foreign currency hedging capability.

Total assets under management by the parent and subsidiaries as of March 31 was $10.3 billion.

The client contact is Frank J. Keeler, manager.

BT Investment Management

69 Old Broad St., London, England EC2 P2EE; 011-441-726-4141

Total assets managed	$1,097,000,000
Tax-exempt assets managed:	
Total	$98,000,000
Invested overseas	$98,000,000

BT Investment Management, a subsidiary of Bankers Trust — Investment Management Group, had $97.9 million under management for 12 U.S. tax-exempt clients, all of it in international accounts.

Of that total, $97.3 million was invested in foreign stocks and $600,000 was invested in cash equivalents.

The equity assets of the international accounts were most committed to Japan, 48%; the United Kingdom, 12%; Germany, 8%; Switzerland, 7%; and Italy, 6%. All of the assets invested abroad were in commingled accounts.

It also had $999.1 million in foreign pension fund assets under management.

Investment Management offers hedged currency management, global reserve management, active fixed-income, index fund and balanced fund management. The firm relies on portfolio managers based in major investment centers and on information gathered by Bankers Trust's worldwide information network.

The minimum account size for individual management is $7.5 million.

Analysts or portfolio managers are in London, Tokyo, New York, Zurich, Switzerland and Sydney, Australia.

In the year ended March 31, the firm reported a $3 million net gain, all in foreign stock.

It has foreign currency hedging capability and has been registered with the SEC since 1982.

The parent company and subsidiaries had $44 billion total assets under management March 31.

Client contact for the firm is Vik Maharaj.

Capital Guardian Trust Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

Total assets managed	$14,346,000,000
Tax-exempt assets managed:	
Total	$14,197,000,000
Invested overseas	$2,156,000,000

Capital Guardian Trust Co., a subsidiary of The Capital Group Inc., managed $14.2 billion in U.S. tax-exempt assets March 31, of which $2.16 billion was invested overseas for 23 clients. Of the amount invested overseas, $1.84 billion was invested in stocks, $78 million in bonds and $235 million in cash equivalents.

It had $1.99 billion in international accounts, the equity assets of which were committed most heavily in Japan, 35%; Germany, 15.5%; the United Kingdom, 6.1%; Australia, 5.7%; and France, 4.9%.

Capital Guardian had $291 million invested globally, the equity assets of which were committed most heavily to the United States, 33.7%; Japan, 18.3%; Germany, 13.1%; Australia, 5.6%; and the United Kingdom, 4.3%.

Of the U.S. tax-exempt assets invested abroad, $536 million was in commingled accounts.

Capital Guardian uses a fundamental value-oriented approach based on thorough, detailed research supported by direct management contacts. An additional focus is provided by portfolio managers and analysts with country or area economic, political and social overview responsibilities.

The minimum account for individual management is $10 million.

Analysts or portfolio managers are in Los Angeles, San Francisco, New York, Washington, London, Tokyo, Hong Kong and Geneva, Switzerland.

In the year ended March 31, Capital Guardian had a net gain in U.S. institu-

tional tax-exempt business for international and global accounts of $152 million, all in foreign stocks.

It has foreign currency hedging capability.

Total assets under management by the parent and subsidiaries March 31 was $29.13 billion.

The client contact is John H. Seiter, senior vice president, at (213) 486-9436.

Capital Management International GmbH of Deutsche Bank

9 W. 57th St., Suite 4270, New York, N.Y. 10019; (212) 832-1630

Total assets managed	$1,651,000,000
Tax-exempt assets managed:	
Total	$175,000,000
Invested overseas	$175,000,000

Capital Management International GmbH, a subsidiary of Deutsche Bank, had $175 million invested in an international account for one U.S. tax-exempt client as of May 31. Of that, $170 million was in foreign stocks, and $5 million in cash equivalents.

The equity assets of the international account were committed most heavily to Germany, 26.5%; Japan, 20.2%; Italy, 13%; France, 10.7%; and Switzerland, 8.6%.

The firm also manages $1.7 million in non-U.S. pension funds.

Within the concept of a top-down investment approach, the company uses active country rotation. The country/currency selection is fundamentally based and sets the stage for industry selection on a global basis. The stock selection process is value-oriented, emphasizing large-cap stocks reflecting low p/e ratios, financial strength and sustainable earnings growth.

For fixed income, the company uses interest rate forecasting based on fundamental economic analysis.

Minimum account size for individual management is $1 million.

Analysts or portfolio managers are in Frankfurt, West Germany.

The firm had a net gain of $30 million in the year ended May 31, all in foreign stock.

It has non-U.S. currency hedging capability, and has been registered with the SEC since 1983.

The parent company and its subsidiaries had total assets of $25 billion under management May 31.

The client contact is Michael Tintelnot.

Capital Research & Management Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

Total assets managed	$13,170,000,000
Tax-exempt assets managed:	
Total	$2,800,000,000
Invested overseas	$120,000,000

Capital Research & Management Co., a subsidiary of The Capital Group Inc., had $2.8 billion under management for U.S. tax-exempt clients March 31, of which $120 million was invested in non-U.S. markets.

Of the assets invested abroad, $114.84 million was in stocks, $4.92 million in bonds and $249,000 in cash equivalents. All are in mutual funds.

The equity assets of the $25 million in international accounts were committed most heavily to Japan, 18.1%; West Germany, 14.2%; the United Kingdom, 14.1%; Hong Kong, 6.7%; and Australia, 6%.

Capital Research and Management had $80 million in global accounts March 31. The equity assets for these accounts were committed most heavily to the United States, 35.3%; Japan, 13.8%; West Germany, 12.4%; the United Kingdom, 6.7%; and Australia, 4%.

The firm uses a fundamental value-oriented approach based on thorough, detailed research supported by direct management contacts. An additional focus is provided by portfolio managers and analysts with country or area economic, political and social overview responsibilities. International analysts are based in all offices with overall strategy coordinated daily through the Los Angeles office.

Analysts or portfolio managers are in Los Angeles, San Francisco, New York, Washington, London, Tokyo, Hong Kong and Geneva, Switzerland.

The firm has foreign currency hedging capability, and has been registered with the SEC since 1932.

Total assets of the parent and subsidiaries were $29.25 billion March 31.

The client contact is Ben Shattuck, senior vice president, institutional investment services division, American Funds Distributors Inc., (213) 486-9617.

Chase Investors Management Corp.

1211 Avenue of the Americas, New York, N.Y. 10036; (212) 730-3746

Total assets managed	$17,565,000,000
Tax-exempt assets managed:	
Total	$15,020,000,000
Invested overseas	$315,000,000

Chase Investors, a subsidiary of Chase Manhattan Bank, invested $315 million in international markets for 23 U.S. tax-exempt clients as of March 31.

Of that, $264 million was in stocks, $35 million in bonds and $16 million in cash equivalents.

The equity assets were committed most heavily to Japan, 40%; Germany, 15%; the United Kingdom, 13%; Switzerland, 8%; and Italy, 6%.

All of the international assets were in commingled accounts; $48 million was in index funds.

Chase takes a top-down, bottom-up investment approach. Portfolios are diversified with emphasis on individual markets and stock selection, using fundamental economic analysis, active country allocation and moderate cash allocation.

Analysts or portfolio managers are in New York and London.

Minimum account size for individual management is $10 million.

The firm had a net loss of $20 million for the year ended March 31.

It has foreign currency hedging capability, and has been registered with the SEC since 1972.

The client contact is Edward V. Arbaugh, vice president.

Citicorp Investment Management Inc.

Hudson House, 2-10 Tavistock St., London, England WC2E 7PE; 011-441-438-0821

Total assets managed	$10,200,000,000
Tax-exempt assets managed:	
Total	$423,000,000
Invested overseas	$423,000,000

Citicorp Investment Management Inc., a subsidiary of Citicorp Investment Management Inc., had $423 million invested overseas for 91 U.S. tax-exempt clients March 31. Of that, $377 million was in stocks, $42 million in bonds and $4 million in cash equivalents.

The firm had $419 million invested in international accounts for U.S. tax-exempt clients, the equity assets of which were committed most heavily to Japan, 41%; the United Kingdom, 13%; Germany, 9%; Italy, 8%; and France, 8%.

It managed $4 million in global accounts, all non-equity assets.

Of the firm's total assets under management, $82 million was for non-U.S. pension funds.

Of the international investments for U.S. tax-exempt clients, $265 million was in commingled accounts.

Citicorp takes a top-down, bottom-up investment approach. Value is added through active management of markets, currencies and securities selection. It has a value-oriented equity selection bias.

Minimum account size for separate management is $5 million.

Analysts or portfolio managers are in London, Hong Kong and New York.

Citicorp Investment Management Inc. has foreign currency hedging capability.

The parent company and its subsidiaries had total assets of $50 billion under management March 31.

The client contact is B. Hunt Whitbeck Jr., vice president, at (212) 559-2872.

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County Investment Management Ltd.

28 Throgmorton St., London, England EC2N 2AN; 011-441-638-6000

Total assets managed	$10,000,000,000
Tax-exempt assets managed:	
Total	$26,000,000
Invested overseas	$26,000,000

County Investment Management Ltd., a subsidiary of NatWest Investment Bank Ltd., managed $26.25 million overseas for two U.S. tax-exempt clients as of March 31. The entire $26.25 million was invested in foreign stocks.

The equity assets of the international accounts were committed most heavily to Japan, 42%; Germany, 26%; Switzerland, 15%; the United Kingdom, 7%; and Singapore, 7%.

County Investment manages $7.5 billion for non-U.S. pension funds.

County Investment Management's investment approach stresses active market allocation, which is implemented through passive stock selection using market representative funds. Quantitative techniques are applied to monitor and control risk.

Minimum account size for individual management is $10 million.

Analysts or portfolio managers are in London, Hong Kong, Japan and Melbourne, Australia.

The firm has foreign currency hedging capability, and has been registered with the SEC since 1981.

The client contact is Margaret Waller at (212) 248-0100.

Martin Currie Inc.

29 Charlotte Square, Edinburgh, Scotland EH2 4HA; 011-44-31-225-3811

Total assets managed	$185,000,000
Tax-exempt assets managed:	
Total	$185,000,000
Invested overseas	$165,000,000

Martin Currie Inc., a subsidiary of Martin Currie Ltd., managed a total of $185 million in U.S. tax-exempt assets March 31. Of that, $165 million was invested in non-U.S. markets for four clients; $155 million in stocks and $10 million in cash equivalents.

As of March 31, $85 million was invested in international accounts, the equity assets of which were committed most heavily to Japan, 30%; Germany, 21%; the United Kingdom, 12%; the Netherlands, 11%; and France, 8%.

The remaining $100 million was invested globally, with the equity assets committed most heavily to Japan, 28%; the United States, 20%; Germany, 19%; the United Kingdom, 13%; and the Netherlands, 8%.

The firm has a two-stage investment process: the selection of markets using various screens, particularly a currency screen; and the selection of stocks where other screens are employed, qualitative and quantitative. The two major markets, Japan and the United Kingdom, always feature in portfolios.

Minimum account size for separate management is $10 million.

The firm has foreign currency hedging capability, and has been registered with the SEC since 1978.

Assets under management by Martin Currie Ltd. and its subsidiaries totaled $1.6 billion as of March 31.

The client contact is W.M.C. Kennedy.

d

Daiwa International Capital Management Corp.

1 World Financial Center, New York, N.Y. 10281; (212) 945-0099

Total assets managed	$966,000,000
Tax-exempt assets managed:	
Total	$390,000,000
Invested overseas	$390,000,000

Daiwa International Capital Management Corp., a subsidiary of Daiwa International Capital Management Co. Ltd., Tokyo, managed $390 million in international accounts for eight U.S. tax-exempt clients as of March 31, of which $370 million was invested in foreign stocks and $20 million in cash equivalents.

The equity assets were committed most heavily to Japan, Australia, the United Kingdom, Germany and the Netherlands.

The firm also managed $55 million for foreign pension funds as of March 31.

Daiwa is a research-oriented, active manager, seeking incremental returns from equity investments in the international markets. The stock selection process focuses on a company's long-term growth potential and the relative value of its stock price.

Analysts or portfolio managers are in Tokyo, London and New York.

Minimum account size for individual management is $5 million.

Daiwa has foreign currency hedging capability, and has been registered with the SEC since 1981.

The client contact is Michael J. Bonner, senior vice president.

e

Edinburgh-Wilmington International Capital Management

1100 N. Market St., Wilmington, Del. 19801; (302) 651-8713

Total assets managed	$17,000,000
Tax-exempt assets managed:	
Total	$300,000
Invested overseas	$300,000

Edinburgh-Wilmington International Capital Management, a subsidiary of Wilmington Trust Co./Edinburgh Fund Managers PLC, had $300,000 in international accounts for two U.S. tax-exempt clients as of March 31. Of that, $291,000 was in foreign stocks and $9,000 in cash equivalents. The equity assets were all committed to Japanese special equities.

The company invests only in Japanese emerging-growth companies in a limited number of economic sectors or industries.

It has portfolio managers or analysts in Edinburgh, Scotland.

Minimum account size for individual management is $5 million.

The firm has non-U.S. currency hedging capability. It has been registered with the SEC since 1985.

Total discretionary assets under management by the parent company and its subsidiaries was $16.4 billion as of March 31.

Client contact is P.G. Rickards.

Equitable Life Assurance Society of the United States

787 Seventh Ave., New York, N.Y. 10019; (212) 554-1234

Total assets managed	$8,000,000
Tax-exempt assets managed:	
Total	$8,000,000
Invested overseas	$8,000,000

Equitable Life Assurance Society of the United States had $8 million in international accounts for six U.S. tax-exempt clients as of March 31. Of that, $6.56 million was invested in foreign stocks and $1.44 million in cash equivalents (including a cash contribution of $1.195 million March 31).

The equity assets were committed most heavily in Japan, 39.2%; the United Kingdom, 9.5%; Germany, 9.2%; Switzerland, 5.9%; and France, 5.4%.

The firm invested all of its U.S. tax-exempt assets in commingled accounts.

The international fund is equity-oriented with flexibility to invest in cash or fixed-income securities for defensive purposes. The investment objectives are to produce a stable rate-of-return in excess of the EAFE, to outperform other managers and to preserve capital.

Assets are allocated to the portfolio managers through a formula that is a fraction of EAFE weights; the fund is diversified by stock capitalization, country and portfolio manager. The Pacific Basin and Europe Manager restrict investments to their respective regions and focus on small- and medium-capitalization stocks, while the swing portfolio manger will invest in either region and focus on large-cap stocks. All three managers operate with autonomy and flexibility within guidelines set by Equitable.

Plan sponsors also are given the option of determining asset allocation or selecting one or two of the individual portfolios for investment.

Analysts or portfolio managers are in Tokyo, London and New York.

Minimum account size for individual management is $10 million.

Net gain for the year ended March 31 was $8 million, of which $6.6 million was for foreign stock.

The firm has foreign currency hedging capability and has been registered with the SEC since 1970.

The parent company and its subsidiaries had total assets of $91.4 billion under management as of Dec. 31.

Client contact is John F. Norris, vice president, at (201) 392-5211.

European & Pacific Investment Management

1100 Melville, Suite 620, Vancouver, V6E 4A6, British Columbia; (604) 687-7306

Total assets managed	$190,000,000

European & Pacific Investment Management, a subsidiary of AMI Asset Management International Inc., managed $190 million in total assets, all of which were for non-U.S. pension funds.

The firm's services are offered to Canadian clientele only.

Minimum account size for individual management is $7.16 million.

The firm employs Robert Fleming, London, and Jardine Fleming, Hong Kong, as portfolio managers.

The firm emphasizes the faster growing and generally overlooked national markets using a fundamentalist approach.

It has non-U.S. currency hedging capability.

Client contact is Frank H. Brouwer, executive vice president.

f

Favia Hill & Associates

30 Rockefeller Plaza, New York, N.Y. 10112; (212) 621-2858

Total assets managed	$6,000,000,000
Tax-exempt assets managed:	
Total	$102,000,000
Invested overseas	$102,000,000

Favia Hill & Associates, a subsidiary of Chemical New York Corp., managed $102 million in international accounts for 18 U.S. tax-exempt clients as of March 31, all of which was invested in foreign stocks.

The assets were committed most heavily to Japan, 42%; the United Kingdom, 30%; France, 11%; the Netherlands, 9%; and Germany, 6%.

All assets invested abroad were for commingled accounts.

Favia Hill concentrates on the primary area (EAFE) maintaining an average weighting for each primary market unless an anomaly appears. The firm's process screens constantly for anomalies.

Minimum account size for individual management is $2 million.

Analysts or portfolio managers are stationed in London.

Net gain for the year ended March 31 was $22 million, all of which was for non-U.S. stocks.

The firm has foreign currency hedging capability and has been registered with the SEC since 1980.

Assets under management by the parent and subsidiaries as of March 31 totaled $16 billion.

The client contact is Erich G. Weissenberger Jr., senior vice president-director of marketing.

International managers ranked by U.S. tax-exempt assets under management for global accounts

	Name	$ mils.
1.	Templeton International	2,042
2.	Capital Guardian Trust Co.	291
3.	Fidelity International	230
4.	J.P. Morgan Investment Mgmt.	226
5.	Fiduciary Trust Co. of N.Y.[1]	188
6.	Rowe Price-Fleming	173
7.	Martin Currie Inc.	100
8.	Schruder Capital Mgmt.[4]	99
9.	PCM International	98
10.	G.T. Capital Mgmt. Inc.	96
11.	Wertheim Philippe	94
12.	Thomas J. Herzfeld Advisors	85
13.	N.M. Rothschild International	82
14.	Capital Research & Mgmt.	80
15.	Barclays De Zoete Wedd	72
16.	Kleinwort Benson International	68
17.	Morgan Grenfell Investment	68
18.	First Chicago Investment	62
19.	Lombard Odier International	58
20.	Wells Fargo Investment Advisors	50
21.	American Express Asset Mgmt.	49
22.	IDS International Inc.	47
23.	Van Eck Investments	36
24.	Warburg Investment Mgmt.[3]	20
25.	Julius Baer Investment Mgmt.	19
26.	Northern Trust Co.	15
27.	Simms Capital Mgmt.	15
28.	Alliance Capital	11
29.	SBC Portfolio Mgmt.	10
30.	Scudder, Stevens & Clark	6
31.	Citicorp Investment Mgmt.	4
32.	Ivory & Sime International	4
33.	ABD International Mgmt.	0
34.	AIG Global Investors Inc.	0
35.	Aetna MIM Asset Mgmt. Ltd	0
36.	Alexander, Scriver & Associates	0
37.	BA Investment Mgmt.	0
38.	BEA Associates Inc.	0
39.	BT Investment Mgmt.	0
40.	Baillie Gifford (Overseas)	0
41.	Baring International	0
42.	Batterymarch Financial[4]	0
43.	Bessemer Trust Co.	0
44.	Arnhold & S. Bleichroeder	0
45.	Brown Brothers Harriman	0
46.	Capital Mgmt. International	0
47.	Chase Investors Mgmt.	0
48.	County Investment Mgmt. Ltd.	0
49.	Daiwa International Capital	0
50.	Edinburgh-Wilmington	0
51.	Equitable Life Assurance	0
52.	European & Pacific Investment	0
53.	Favia Hill & Associates	0
54.	Foreign and Colonial Asset	0
55.	Glenmede Trust Co.	0
56.	Grantham, Mayo, Van Otterloo	0
57.	HT Investors Inc.	0
58.	Henderson International Inc.	0
59.	Kangyo Kakumaru Capital Mgmt.	0
60.	Kemper-Murray Johnstone	0
61.	Mellon-Pictet International	0
62.	Merrill Lynch Asset Mgmt.	0
63.	NCNB National Bank	0
64.	New Japan Capital Mgmt.	0
65.	Newport Pacific Mgmt.	0
66.	Nikko & Associates Inc.	0
67.	Nomura Capital Mgmt.	0
68.	PM Portfolio Mgmt.	0
69.	Provident Capital Mgmt.	0
70.	Putnam International Advisors	0
71.	RepublicBank Dallas	0
72.	Frank Russell Trust Co.[2]	0
73.	State Street Bank and Trust Co.	0
74.	Touche Remnant Pension Mgmt.	0
75.	Travelers Asset Mgmt.	0
76.	Wardley Marine International	0
77.	Wellington Mgmt. Co.	0
	TOTAL	**4,498**

[1] data as of Dec. 31, 1985
[2] includes Peoples National Bank of Washington
[3] includes C&S Investment Advisors Inc.
[4] includes The Vanguard Group

Fidelity International Investment Advisors

68 Devonshire St., Boston, Mass. 02109; (617) 570-6330

Total assets managed	$2,500,000,000
Tax-exempt assets managed:	
Total	$2,200,000,000
Invested overseas	$2,100,000,000

Fidelity International Investment Advisors Ltd., a subsidiary of Fidelity International Ltd., managed $2.1 billion in international and global accounts for 20 U.S. tax-exempt clients as of March 31. Of that sum, $1.995 billion was in foreign stocks and $105 million was in cash equivalents.

Of the firm's total of $2.5 billion in assets under management, $300 million was for non-U.S. pension funds.

The international accounts totaled $1.9 billion, the equity portion of which was committed most heavily to Japan, 37%; Italy, 13%; France, 10%; the United Kingdom, 10%; and Germany, 8%.

The global accounts totaled $230 million. Equity assets from those accounts were most heavily invested in the United States, 39%; Japan, 20%; Italy, 7%; France, 5%; and the United Kingdom, 5%.

Of the tax-exempt assets invested abroad, $100 million was in commingled accounts.

The geographic and asset allocation are decided by an international investment policy group. Assets then are invested by portfolio managers at the local level, who have full discretion with respect to industry/stock selection.

The firm has regional offices in Boston, London, Tokyo and Hong Kong.

The minimum account size for individual management is $20 million.

In the year ended March 31, Fidelity International Investment Advisors registered a net gain of $110 million in U.S. institutional tax-exempt business, all in non-U.S. stock.

The firm has non-U.S. currency hedging capability. It has been registered with the SEC since 1977.

The parent company and subsidiaries had $5.6 billion in total assets under management as of March 31.

The client contact is William B. Fink, vice president.

Fiduciary Trust Co. of New York

2 World Trade Center, New York, N.Y. 10048; (212) 466-4100

Total assets managed	$11,200,000,000
Tax-exempt assets managed:	
Total	$8,823,000,000
Invested overseas	$2,170,000,000

The Fiduciary Trust Co. of New York managed $2.17 billion in non-U.S. markets for seven clients as of Dec. 31. Of that, $1.082 billion was invested in foreign stocks and $1.088 billion was invested in foreign bonds.

International investments accounted for $45 million, with the equity assets most heavily committed to Japan, 35%; Germany, 12%; Netherlands, 10%; France, 9%; and Switzerland, 9%.

Global investments accounted for $187.5 million, with the equity assets most heavily committed to the United States, 47%; Japan, 22%; Germany, 6%; France, 5%; and Switzerland, 5%.

Of the tax-exempt assets invested abroad, $5.1 million was in commingled accounts, $40.2 million was in mutual funds.

Fiduciary Trust also managed $4.908 billion for foreign pension funds as of Dec. 31.

Fiduciary's international specialists emphasize stock selection within a macroeconomic framework. The active management style produces concentrated portfolios both in stocks and markets. Country allocations vary from EAFE weightings according to the firm's assessment of the markets. Currency and market diversification are used to reduce risk. It has foreign currency hedging capability.

Fiduciary Trust has analysts or portfolio managers in London, New York, Los Angeles and Geneva, Switzerland.

The minimum account size for individual management is $10 million.

For the year ended Dec. 31, the trust company experienced a $170 million gain in U.S. institutional tax-exempt business. Of that, $6 million was for foreign stock, $56 million for foreign bonds and $108 million for U.S. bonds.

As of Dec. 31, the parent company and its subsidiaries had $11.2 billion in total assets under management.

Client contacts are George Mullen and Belinda Gibbs.

First Chicago Investment Advisors

3 First National Plaza, Chicago, Ill.

Total assets managed	$7,998,000,000
Tax-exempt assets managed:	
Total	$7,890,000,000
Invested overseas	$1,908,000,000

First Chicago Investment Advisors, a subsidiary of First Chicago Corp., managed $1.908 billion in international and global accounts for 81 U.S. tax-exempt clients as of March 31. Of that, $645.3 million was in foreign stocks, $1.017 billion in foreign bonds, and $245.5 million in cash equivalents.

The international accounts totaled $1.846 billion. The equity assets in those accounts were most heavily invested in Japan, 35.9%; the United Kingdom, 14.2%; Germany, 8.4%; Switzerland, 5.4%; and France, 5.4%.

The global accounts totaled $62.2 million, all in fixed income.

Of the assets invested abroad, $520 million were in commingled accounts.

First Chicago Investment Advisors is an active manager of diversified international equity and fixed-income portfolios. The firm uses internally developed valuation models, risk systems and other quantitative techniques in a structured decision process. The equity approach is value-oriented and identifies mispriced markets and securities. Fixed income is treated as a separate asset class, with interest rate and currency forecasts integrated into strategic forecasts.

Minimum account size for individual management is $1 million.

Analysts and portfolio managers are stationed in London and Chicago.

In the year ended March 31, the firm reported a net gain of $989.4 million in U.S. institutional tax-exempt business. Of that, $531 million was for foreign stock and $457.9 million was for foreign bonds, including $104 million in cash equivalents.

It has foreign currency hedging capability.

As of March 31, the parent and its subsidiaries had $11.26 billion in total assets under management.

The client contact is Richard C. Carr, managing director.

Foreign and Colonial Asset Management

45 Wall St., New York, N.Y. 10005; (212) 806-4480

Total assets managed	$69,000,000
Tax-exempt assets managed:	
Total	$20,000,000
Invested overseas	$20,000,000

Foreign and Colonial Asset Management, a subsidiary of Foreign & Colonial Management Ltd., London, and U.S. Trust of New York, managed $20 million in international accounts for eight U.S. tax-exempt clients as of March 31. Of that, $19.8 million was in foreign stocks and $200,000 was in cash equivalents.

The equity assets were committed most heavily to Japan, 48%; the United Kingdom, 15%; Germany, 10%; Switzerland, 6%; and France, 6%.

The firm also managed $20 million for foreign pension funds.

Of U.S. tax-exempt assets, all $20 million was invested in commingled accounts.

Foreign and Colonial Asset Management employs an equity fundamental value discipline (e.g. sustainable earnings growth, strong balance sheets, share of ownership by management, competitive advantage in technology or manufacturing) with emphasis on sector analysis in the Far East. A fully invested position is normal.

Minimum account size for individual management is $5 million.

Analysts or portfolio managers are stationed in London.

In the year ended March 31, the firm experienced a net gain of $500,000, all in non-U.S. stock.

The firm has foreign currency hedging capability and has been registered with the SEC since 1982.

The parent companies and subsidiaries had $13 billion in total assets under management as of March 31.

Client contact is John K. Holland, marketing director.

Pensions & Investment Age will publish its annual ranking and profiles of real estate investment advisers in the Sept. 15 issue.

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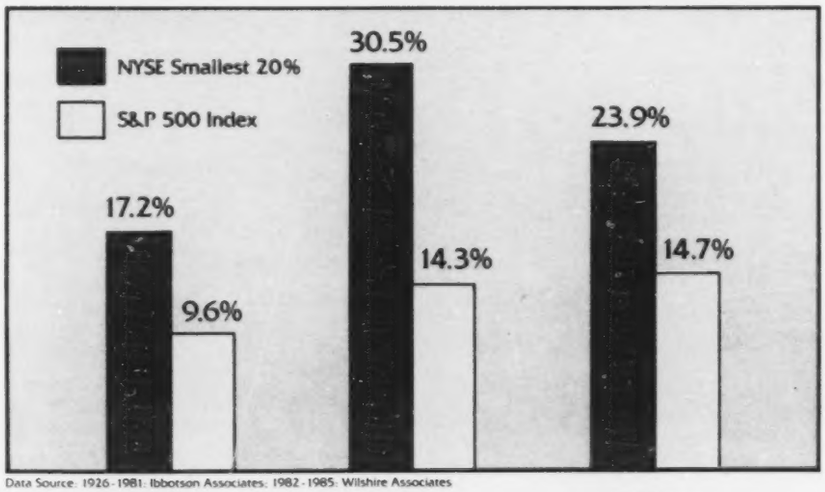

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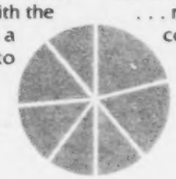

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g

The Glenmede Trust Co.

229 S. 18th St., Philadelphia, Pa. 19103; (215) 875-3230

Total assets managed	$3,500,000,000
Tax-exempt assets managed:	
Total	$2,500,000,000
Invested overseas	$50,000,000

The Glenmede Trust Co. managed $50 million in U.S. institutional tax-exempt assets in international accounts for six clients as of March 31. Of that, $45 million was in foreign stocks, $4 million in foreign bonds and $1 million in cash equivalents.

The equity assets were most heavily committed to Japan, 45%; Germany, 20%; the Netherlands, 10%; the United Kingdom, 5%; and Switzerland, 5%.

Glenmede Trust uses a value approach empioying computers to identify countries and stocks that are undervalued.

The minimum account size for individual management is $1 million.

The client contact is John W. Church Jr.

Grantham, Mayo, Van Otterloo & Co.

125 High St., Boston, Mass. 02110; (617) 574-4817

Total assets managed	$1,561,000,000
Tax-exempt assets managed:	
Total	$1,561,000,000
Invested overseas	$1,561,000,000

Grantham, Mayo, Van Otterloo & Co. managed $1.561 billion in international accounts for 27 U.S. tax-exempt clients as of March 31. Of that, $1.363 billion was in foreign stocks, $42 million was in foreign bonds and $156 million was in cash equivalents.

The equity assets in those accounts were committed most heavily to the United Kingdom, 27%; Japan, 20%; Germany, 10.8%; the Netherlands, 6%; and France, 5%.

Of the tax-exempt assets invested abroad, $1.171 billion was in commingled accounts. Of that amount, $54 million was in mutual funds and $402 million was in index funds, which is the firm's core product.

The core product is designed to provide a highly liquid, highly diversified way for large pools of money to achieve significant international exposure. It is highly disciplined, being data/computer driven with a minimum of human intervention, and it aims at modestly outperforming EAFE.

The minimum account size for individual management is $50 million.

In the year ended March 31, the firm reported a $75 million net gain in U.S. institutional tax-exempt business, all in foreign stock.

It has foreign currency hedging capability and has been registered with the SEC since 1977.

The client contact is Eyk Van Otterloo.

G.T. Capital Management

601 Montgomery St., Suite 1400, San Francisco, Calif. 94111; (415) 392-6181

Total assets managed	$1,341,000,000
Tax-exempt assets managed:	
Total	$959,000,000
Invested overseas	$950,000,000

G.T. Capital Management Inc., a subsidiary of G.T. Management Ltd., London, managed $949.6 million in international and global accounts for 14 U.S. institutional tax-exempt clients as of March 31. Of that, $882 million was invested in foreign stocks, $37.5 million in foreign bonds, and $30.1 million in cash equivalents.

The equity portion of the $862.8 million in international accounts was committed most heavily to Japan, 42%; the United Kingdom, 17%; Germany, 8%; Hong Kong, 6%; and France 5%.

The equity portion of the $96.1 million in global accounts was most heavily invested in the United States, 45%; Japan, 23%; the United Kingdom, 11%; Germany, 5%; and Hong Kong, 4%.

The firm also manages $48.1 million for foreign pension funds.

G.T. Capital Management's investment philosophy of global investing combines a top-down approcach to geographic asset allocation (growth economies) with a bottom-up approach to security selection (growth companies).

Analysts or portfolio managers are in London, Hong Kong; Tokyo; Sydney, Australia; San Francisco; and Menlo Park, Calif.

The minimum account size for individual management is $15 million.

For the year ended March 31, the firm had a $68.3 million net loss in U.S. institutional tax-exempt business, in foreign stock.

The firm has foreign currency hedging capability and has been registered with the SEC since 1974.

The parent company and its subsidiaries had $5 billion in total assets under management as of March 31.

The client contact is Mary Lou Bernholt, vice president-marketing and client services.

h

Henderson International Inc.

630 Fifth Ave., Suite 811, New York, N.Y. 10111; (212) 315-5660

Total assets managed	$6,500,000,000

As of March 31, Henderson International Inc., a subsidiary of Henderson Administration Group PLC, London, managed $6.5 billion in total assets, of which $2.7 billion was for non-U.S. pension funds. It has no U.S. tax-exempt clients.

Henderson International Inc. is an equity investment manager. Investment objectives are to outperform the average manager in all geographic markets through stock selection and to add value through country emphasis. The managers are active country allocators, earnings-oriented in stock selection and accounts normally are fully invested.

Minimum account size for individual management is $10 million.

It has foreign currency hedging capability and has been registered with the SEC since 1985.

The client contact is Geoff Owen, senior vice president.

Thomas J. Herzfeld Advisors

7800 Red Road, South Miami, Fla. 33143; (305) 665-6500

Total assets managed	$100,000,000
Tax-exempt assets managed:	
Total	$85,000,000
Invested overseas	$40,000,000

Thomas J. Herzfeld Advisors Inc. managed $85 million of U.S. institutional tax-exempt assets in global accounts as of March 31.

Of that, $40 million was invested in foreign markets for five U.S. institutional tax-exempt clients: $38 million in foreign stocks and $2 million in cash equivalents.

The firm's global holdings, which include the international assets, were distributed among the United States, 60%; the United Kingdom, 38%; and Canada, 2%.

Thomas J. Herzfeld Advisors attempts to enhance long-term closed-end fund investment through a rotational trading strategy. Emphasis is on market timing, portfolio evaluation of individual funds and intensive discount analysis. During periods when closed-end fund discounts are not deemed attractive, common stocks are included for consideration during rising markets. Emphasis is placed on high-quality, high-yield, low p/e or out-of-favor issues.

Minimum account size for individual management is $1 million.

In the year ended Dec. 31, the firm reported a net gain of $8 million in U.S. institutional tax-exempt business, all in foreign stock.

The firm has foreign currency hedging capability and has been registered with the SEC since 1984.

Client contact is Cecilia L. Gondor.

HT Investors Inc.

321 S. Main St., Providence, R.I. 02903; (401) 276-6188

Total assets managed	$1,000,000,000
Tax-exempt assets managed:	
Total	$1,000,000,000
Invested overseas	$8,000,000

HT Investors Inc., a subsidiary of RIHT Financial Corp., managed $7.9 million in international accounts for 18 U.S. tax-exempt clients as of March 31. Of that, $7.8 million was in non-U.S. stocks and $100,000 was in cash equivalents. All were invested in commingled accounts.

The equity assets were most heavily committed to Japan, 35%; the United Kingdom, 19%; France, 10%; Switzerland, 10%, and West Germany, 6%.

The firm takes a top-down country allocation, bottom-up stock selection approach.

Minimum account size for individual management is $1 million.

In the year ended March 31, the firm experienced a net loss of $491,000, all in non-U.S. stocks.

The firm has foreign currency hedging capability and has been registered with the SEC since 1982.

The parent company and subsidiaries had $8 billion in total assets under management as of March 31.

Client contact is J. Richard Schroder.

i

IDS International Inc.

3100 IDS Tower, Minneapolis, Minn. 55474; (612) 372-3079

Total assets managed	$569,000,000
Tax-exempt assets managed:	
Total	$266,000,000
Invested overseas	$251,000,000

IDS International Inc., a subsidiary of IDS Financial Services Inc., managed $251.4 million in international and global accounts for seven U.S. tax-exempt clients as of March 31. Of that, $247 million was in foreign bonds and $4.4 million was in cash equivalents.

The equity portion of the $218.3 million of U.S. tax-exempt assets in international accounts was most heavily committed to Japan, 47%; the United Kingdom, 14%; Germany, 7%; France, 6%; and Singapore, 4%.

The equity portion of the $47.2 million of U.S. tax-exempt assets in global accounts are most heavily committed to the United States, 30%; Japan, 27%; the United Kingdom, 9%; France, 7%; and Germany 5%.

IDS also managed $175 million for foreign pension funds.

Of the amount invested abroad for U.S. tax-exempt clients, $42 million was in commingled accounts. It also had $128.6 million in index funds.

IDS International Inc. takes a top-down, bottom-up approach to international investing. Base upon a macroeconomic, geopolitical overview, assets are allocated among stocks, bonds and cash; currency views are taken; countries are distributed into economic categories and weighted. Stocks, which are placed into four categories, are selected following in-depth fundamental research.

Portfolio managers or analysts are in Minneapolis and London.

The minimum account size for individual management is $15 million.

In the year ended March 31, the firm reported a net gain of $100.8 million in U.S. institutional tax-exempt business for international and global accounts. The entire gain was realized in foreign stocks.

IDS has foreign currency hedging capability and has been registered with the SEC since 1981.

Assets under management by the parent and subsidiaries totaled $26.84 billion as of March 31.

The client contact is Cheryl K. Gruetzmacher, vice president-director of marketing.

Ivory & Sime International

39 Main St., Chatham, N.J. 07928; (201) 635-6700

Total assets managed	$115,000,000
Tax-exempt assets managed:	
Total	$79,000,000
Invested overseas	$79 million

Ivory & Sime International Inc., a subsidiary of Ivory & Sime PLC, Edinburgh, Scotland, managed $79 million overseas for four U.S. tax-exempt clients as of March 31. Of that, $73 million was in foreign stocks, $2 million in foreign bonds and $4 million in cash equivalents.

The equity assets of the $75 million invested in international accounts were committed most heavily to Japan, 33%; France, 12%; the Netherlands, 12%; West Germany, 10%; and the United Kingdom, 9%.

The firm also managed $4 million in global accounts, the equity assets of which were committed most heavily to the United States, 25%; Japan, 21%; the United Kingdom, 10%; Canada, 10%; and Australia, 7%.

Of the $115 million total under management, $36 million was for non-U.S. pension funds.

Ivory & Sime takes a long-term, fundamental, research-based approach with primary emphasis on stock selection and identifying superior companies in a global context.

Analysts or portfolio managers are in Edinburgh.

Minimum account size for individual management is $5 million.

The firm had a net loss of $20 million for the year ended March 31, all in foreign stock.

It has foreign currency hedging capability and has been registered with the SEC since 1978.

Assets under management by the parent and its subsidiaries totaled $3 billion as of March 31.

Client contact is Keith H. Wood, president.

k

Kangyo Kakumaru Capital Management Corp.

1 State Street Plaza, New York, N.Y. 10004; (212) 509-4661

Total assets managed	$189,000,000

Kangyo Kakumaru Capital Management Corp., a subsidiary of Kangyo Kakumaru Research Institute Inc., Tokyo, did not have any assets under management for U.S. or non-U.S. pension funds as of March 31.

Analysts or portfolio managers are in New York, San Francisco, Tokyo and Osaka, Japan.

Minimum account size is $1 million.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1983.

The parent and its subsidiaries managed a total of $991 million as of March 31.

Client contact is Etsuo Ogiwara.

Kemper-Murray Johnstone International

120 S. LaSalle St., Chicago, Ill. 60603; (312) 845-1880

Total assets managed	$355,000,000
Tax-exempt assets managed:	
Total	$178,000,000
Invested overseas	$178,000,000

Kemper-Murray Johnstone International, a subsidiary of Kemper Financial Services, managed $178 million in international accounts for three U.S. institutional tax-exempt clients as of March 31. Of that, $153 million was in foreign stocks, $9 million in foreign bonds and $16 million in cash equivalents.

The equity assets were committed most heavily to Japan, 23%; the United Kingdom, 15%; Germany, 9%; Switzerland, 9%; and France, 8%.

Of the assets invested abroad, $107 million was in a mutual fund.

Kemper-Murray Johnstone has a fundamental growth stock orientation. It seeks early identification of companies about to enter a superior earnings growth phase. The objective is to provide real returns (vs. CPI) and superior returns (vs. EAFE and peers), during a complete market cycle.

Minimum account size for individual management is $5 million.

Analysts or portfolio managers are in Chicago and Glasgow, Scotland.

Net gain for the year ended March 31 was $59.1 million: $56.15 million in foreign stock and $2.96 million in foreign bonds.

The firm has foreign currency hedging capability and has been registered with the SEC since 1980.

The parent company and its subsidiaries managed total assets of $36.9 billion as of March 31.

The client contact is Gavin Dobson.

Kleinwort Benson International Investment

100 Wall St., New York, N.Y. 10005; (212) 747-0440

Total assets managed	$320,000,000
Tax-exempt assets managed:	
Total	$320,000,000
Invested overseas	$320,000,000

Kleinwort Benson International Investment Ltd., a subsidiary of Kleinwort Benson Ltd., London, managed $320 million in international and global accounts for 13 tax-exempt U.S. clients as of March 31.

Of that total, $250 million was in foreign stocks, $68.2 million in foreign bonds and $1.8 million in cash equivalents.

The equity portion of the $251.8 million in international accounts was most heavily committed to Japan, 35%; the United Kingdom, 19%; France, 10%; Switzerland, 9%; and Italy, 7%.

The equity portion (25%) of the $68.2 million in global accounts was committed most heavily to Japan, 12%; the United Kingdom, 4%; Germany, 3%; France, 2%; and the Netherlands, 2%.

Of the assets invested abroad, $86 million was in mutual funds.

The firm uses a top-down macro analysis for bonds, emphasizing quality. For equities, the firm employs a bottom-up stock selection with low p/e bias relative to sector and market. The emphasis is on in-house research seeking earnings growth and financial strength not fully recognized by markets. Analysts frequently visit companies worldwide. For cash, the firm practices active management.

Analysts or portfolio managers are in London; New York; Tokyo; Hong Kong; Geneva, Switzerland; Brussels, Belgium; and Melbourne, Australia.

Minimum account size is $5 million.

For the year ended March 31, the firm posted a $119.2 million net gain: $94.4 million for foreign stock and $24.8 million for foreign bonds.

Kleinwort Benson International has foreign currency hedging capability and has been registered with the SEC since 1980.

The parent company and subsidiaries had $4.7 billion in total assets under management as of March 31.

The client contact is Ian E. Lindsay.

l

Lombard Odier International Portfolio Management Ltd.

Norfolk House, 13 Southampton Place, London, WC1A 2AJ, England; 011-441-831-2350

Total assets managed	$1,374,000,000
Tax-exempt assets managed:	
Total	$233,000,000
Invested overseas	$233,000,000

Lombard Odier International Portfolio Management Ltd., a subsidiary of Lombard Odier & Cie, Geneva, Switzerland, managed $233.2 million in for-

eign markets for U.S. tax-exempt clients as of March 31. Of that, $224 million was in non-U.S. stocks and $9 million was in non-U.S. bonds.

A total of $175.5 million was in international accounts, the equity assets of which were most heavily committed to Japan, 43.4%; the United Kingdom, 12.9%; Italy, 12.7%; Germany, 9.2%; and France, 7.4%.

Global accounts comprised $57.7 million, the equity assets of which were most heavily committed to the United States, 40.7%; Japan, 18.2%; France, 11.8%; Italy, 7.8%; and the Netherlands, 6%.

Of the total assets, $1.14 billion was invested for non-U.S. pension funds.

Lombard Odier seeks out major political and economic trends and imposes conviction country and currency allocations, including hedging, on conviction stocks. Research groups in London, Geneva and Amsterdam provide in-depth corporate research. The firm has an interest rate-anticipation approach to fixed income, selecting individual securities based on market value analysis. Options, stock index futures and fixed-income futures are used.

Minimum account size for individual management is $5 million.

Analysts or portfolio managers are in Geneva, Amsterdam and Montreal.

The firm has a non-U.S. currency hedging capability, and has been registered with the SEC since 1978.

Client contact is Frederik s'Jacob.

m

Mellon-Pictet International Management Ltd.

Cutlers Gardens, 5 Devonshire Square, London, EC2M 4LD, England; 011-44-1-283-7471

Total assets managed	$915,000,000
Tax-exempt assets managed:	
Total	$531,000,000
Invested overseas	$531,000,000

Mellon-Pictet International Management Ltd., a subsidiary of Mellon Bank, Pittsburgh, and Pictet et Cie, Geneva, Switzerland, managed $531 million in international accounts for 18 U.S. tax-exempt clients as of March 31. All of the assets were in foreign stocks.

The equity assets were most heavily committed to Japan, 42%; France, 21%; the United Kingdom, 12%; the Netherlands, 11%; and Hong Kong, 9%.

The firm also manages $2 million for foreign pension funds.

Of the assets invested abroad, $21 million was in commingled accounts.

Mellon-Pictet practices active asset allocation among markets and currencies determined by five managers. It uses active stock selection. The firm's degree of concentration is tailored for each client's needs.

It has analysts or portfolio managers in London, Tokyo and Geneva, Switzerland.

The minimum account size for individual management is $5 million.

For the year ended March 31, the firm experienced a $100 million net gain, all in foreign stocks.

The firm has foreign currency hedging capability and has been registered with the SEC since 1980.

Client contacts are Dan Blanks in London and Rod Hearn in New York at (212) 702-5268.

Merrill Lynch Asset Management Inc.

Box 9011, Princeton, N.J. 08543-9011; (609) 282-2301

Total assets managed	$3,300,000,000
Tax-exempt assets managed:	
Total	$2,500,000,000

Merrill Lynch Asset Management Inc., a subsidiary of Merrill Lynch & Co., managed $200 million for U.S. clients in overseas markets as of March 31. The company could not provide a breakout of taxable and tax-exempt assets.

Of the $3.3 billion in total assets, $384 million was for foreign pension funds.

Merrill Lynch Asset Management Inc. manages assets on a value basis, first taking client requirements and currency considerations into account.

Analysts or portfolio managers are in London, New York and Geneva, Switzerland.

The minimum account size for individual management is $1 million.

The firm has been registered with the SEC since 1976.

The client contact is Bernard J. Durnin, senior vice president.

Morgan Grenfell Investment Services Ltd.

46 New Broad St., London, EC2M INB, England; 011-44-1-256-7500

Total assets managed	$2,800,000,000
Tax-exempt assets managed:	
Total	$2,300,000,000
Invested overseas	$2,270,000,000

Morgan Grenfell Investment Services Ltd., a subsidiary of the Morgan Grenfell Group PLC, had $2.27 billion of U.S. institutional tax-exempt assets invested in foreign markets for 44 clients as of March 31.

Of that, $2.179 billion was invested in foreign stocks, $45.4 million was in foreign bonds and $45.4 million was in cash equivalents.

The equity assets of the $1.59 billion in international accounts were most heavily committed to Japan, 58%; the United Kingdom, 15%; Germany, 9%; France, 6%; and the Netherlands, 5%.

The equity assets of the $68 million in global accounts were most heavily committed to the United States, 45%; Japan, 32%; the United Kingdom, 8%; Germany, 5%; and France, 3%.

The firm also manages $502 million in foreign pension assets.

Morgan Grenfell Investment Services Ltd. is an active, global manager. Equal emphasis is placed on the market decision and stock selection. No investments are made without considering the currency impact.

It has portfolio managers or analysts in London; New York; Tokyo; Singapore; Sydney, Australia; and Geneva, Switzerland.

The minimum account size for individual management is $15 million.

In the year ended March 31, the firm reported a $38 million net gain in U.S. institutional tax-exempt business: $37.24 million in foreign stock and $760,000 in foreign bonds.

The firm has foreign currency hedging capability and has been registered with the SEC since 1977.

The parent company and subsidiaries had $19.4 billion under management as of March 31.

The client contacts are Graham D. Bamping and Alison J. Ramsdale, vice presidents, at (212) 715-1700.

J.P. Morgan Investment Management Inc.

83 Pall Mall, London, SW1Y 5ES, England; 011-44-1-930-9444

Total assets managed	$9,158,000,000
Tax-exempt assets managed:	
Total	$3,899,000,000
Invested overseas	$3,860,000,000

J.P. Morgan Investment Management Inc., a subsidiary of J.P. Morgan Investment Management Inc., New York, managed $3.86 billion in overseas accounts for 29 U.S. tax-exempt clients as of March 31. Of that, $2.87 billion was in foreign stocks, $887 million in foreign bonds and $103 million in cash equivalents.

It had $3.67 billion in international accounts, the equity assets of which were committed most heavily to Japan, 41%; Germany, 16%; the United Kingdom, 15%; Switzerland, 9%; and France, 6%.

J.P. Morgan also managed $226 million in global accounts, the equity assets of which were committed most heavily to Japan, 34%; the United States, 16%; Germany, 14%; the United Kingdom, 12%; and Switzerland, 8%.

It also managed $485 million in foreign pension assets.

Of the assets invested abroad, $1.564 billion was in commingled accounts.

The firm uses a combination of top-down and bottom-up approaches to both equity and fixed-income investments. The investment strategy is derived from capital market analysis and sector and industry research, active cash and country allocations, active hedging where permitted and broadly diversified portfolios.

Analysts or portfolio managers are in New York, London, Tokyo and Singapore.

Minimum account size for individual management is $10 million.

J.P. Morgan reported a net loss for the year ended March 31 of $23 million: a $143 million loss in foreign stocks and a $120 million gain in foreign bonds.

It has foreign currency hedging capacity and has been registered with the SEC since 1984.

Assets under management by the parent organization and its subsidiaries as of March 31 totaled $45 billion.

The client contact is Helen Braun, assistant vice president, in New York at (212) 826-7449.

n

NCNB National Bank

1 NCNB Plaza T09-1, Charlotte, N.C. 28255; (704) 374-8405

Total assets managed	$7,180,000,000
Tax-exempt assets managed:	
Total	$2,800,000,000
Invested overseas	$160,000,000

NCNB National Bank, a subsidiary of NCNB Corp., had $160 million of U.S. institutional tax-exempt assets in international accounts for 1,300 clients as of March 31. The assets were all in cash equivalents; and all commingled funds.

NCNB seeks to enhance cash equivalent yield through investment in high-quality, liquid non-U.S. assets.

Analysts or portfolio managers are in Charlotte, N.C.; Columbia, S.C.; and Tampa, Fla.

Minimum account size for individual management is $5 million.

NCNB has foreign currency hedging capability.

The parent and subsidiaries had $7.18 billion under management as of March 31.

The client contact is Mark S. Coltrin.

The New Japan Capital Management Co. Ltd.

1 World Trade Center, Suite 4959, New York, N.Y. 10048; (212) 938-5602

Total assets managed	$736,000,000

The New Japan Capital Management Co. Ltd., a subsidiary of New Japan Securities Co. Ltd., Tokyo, had $736 million under management as of March 31. Of that, $30.16 million was for foreign pension funds; none was for U.S. pension funds.

The firm, when dealing with equities, selects portfolios based on a combination of industry risk-return calculations, relative PER analysis and its "SAM-MIT" system for market timing.

Analysts or portfolio managers are in Tokyo.

Minimum account size for individual management is $1 million.

The firm has been registered with the SEC since 1982.

The client contact is Kenji Nakanishi.

Newport Pacific Management

500 Sansome St., Suite 810, San Francisco, Calif. 94111; (415) 781-5801

Total assets managed	$10,000,000

Newport Pacific Management, a subsidiary of Newport International Management Ltd., Hamilton, Bermuda, specializes in growth companies in the Pacific Basin.

The minimum account size for individual management is $1 million.

The firm has been registered w the SEC since 1983.

The parent company and its sub diaries had $33 million in total asse under management March 31.

The client contact is John M. Mu sey.

Nikko & Associates Inc.

350 Park Ave., New York, N.Y. 1002 (212) 319-2730

Total assets managed	$403,000,
Tax-exempt assets managed:	
Total	$42,000,
Invested overseas	$42,000,

Nikko & Associates Inc., a subsidia of Nikko International Capital Manag ment Co. Ltd., Tokyo, managed $ million in international accounts for fi U.S. tax-exempt clients as of Mar 31. Of that, $39.1 million was in f eign stocks and $2.9 million in ca equivalents.

The equity assets were committ most heavily to Japan, 96%; Ho Kong, 3%; and Australia, 1%.

The firm also manages $206 milli for non-U.S. clients.

The firm's aim is to achieve super and consistent investment perfo mance through a combination of acti and core management. Core manag ment (index funds and/or other app cations) allows added value throu specialized active EAFE manageme for the remainder of a portfolio. T firm also adds value by participating the deregulation and privatizati moves both in Europe and the Paci Basin, using its international network

Analysts or portfolio mangers are New York; London; Tokyo; Gene and Zurich, Switzerland; Paris; Fran furt, West Germany; Hong Kong; S gapore; and Sydney, Australia.

Minimum account size for individu management is $1 million for a gro ing account; $5 million for a fix account.

The firm has non-U.S. hedgi capability and has been registered w the SEC since 1981.

The parent company and its sub diaries had total assets of $3.8 billi

BURNS FRY AND TIMMINS INC.

subsidiary of

BURNS FRY LIMITED

Institutional Market Makers

in

Canadian Fixed Income Securities

BURNS FRY AND TIMMINS INC.

New York 212-344-3870

Toronto 416-365-4100

Wall Street Plaza, New York, N.Y. 10005

nder management as of March 31.

The client contact is K. De Ryck, resident.

Nomura Capital Management

180 Maiden Lane, Suite 2903, New York, N.Y. 10038; (212) 509-8181

Total assets managed	$725,000,000
Tax-exempt assets managed:	
Total	$494,000,000
Invested overseas	$494,000,000

Nomura Capital Management Inc., a subsidiary of Nomura Investment Management Co. Ltd., Tokyo, managed $494 million in international accounts for nine U.S. tax-exempt clients as of March 31. All assets were invested in foreign stocks.

Equity assets were committed most heavily to Japan, 55%; the United Kingdom, 13.4%; France, 7.3%; Germany, 7%; and Italy, 5.4%.

The firm employs active equity management in the non-U.S. markets using original fundamental and economic research with a global perspective to create portfolios through a disciplined valuation process and structured management process. Attention is focused on a client's risk parameters.

Analysts or portfolio managers are in Tokyo, New York, London, Washington, Hong Kong, Singapore and China.

Minimum account size for individual management is $5 million.

Net gain for the year ended March 31 in U.S. institutional tax-exempt business was $54 million, all in foreign stock.

The firm has been registered with the SEC since 1976.

Assets under management by the parent and subsidiaries totaled $6.829 billion as of March 31.

Client contact is Brian X. Fitzgibbon.

The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

Total assets managed	$15,000,000
Tax-exempt assets managed:	
Total	$15,000,000
Invested overseas	$15,000,000

The Northern Trust Co., a subsidiary of The Northern Trust Corp., managed $14.7 million in global accounts for three U.S. tax-exempt clients as of March 31, of which $12.2 million was in foreign stocks and $2.5 million in foreign bonds.

The equity assets were committed most heavily to Japan, 36%; France, 12%; Italy, 11%; Germany, 10%; and the Netherlands, 8%.

All of the U.S. tax-exempt assets invested abroad were in commingled accounts.

In its foreign investments, Northern Trust uses extensive analysis of economics, currencies, financial markets and individual companies. The firm seeks to maximize relative and absolute returns consistent with an acceptable level of risk.

Minimum account size for individual management is $100,000.

Net gain for the year ended March 31 was $17,138, all of which was in foreign stocks.

The firm has foreign currency hedging capability and is registered with the SEC.

The parent organization and its subsidiaries managed a total of $95 billion as of March 31.

The client contact is Jennifer Cameron.

P

PCM International

745 Broad St., Newark, N.J. 07101; (201) 877-7982

Total assets managed	$1,700,000,000
Tax-exempt assets managed:	
Total	$525,000,000
Invested overseas	$480,000,000

PCM International, a subsidiary of the Prudential Insurance Co. of America, Newark, N.J., had $480 million in U.S. institutional tax-exempt assets invested overseas for 23 clients as of March 31. Of that, $264 million was in foreign stocks and $216 million in foreign bonds.

PCM had $427 million in international accounts for U.S. tax-exempt clients, with the equity assets most heavily committed to Japan, 50%; France, 13%; the United Kingdom, 11%; Spain, 7%; and Italy, 4%.

It had $98 million in global bond accounts.

The firm had $497 million invested in commingled accounts.

PCM International practices bottom-up stock selection with defensive currency and stock market techniques. When handling bonds, the firm employs currency and maturity management using top-quality issues.

The minimum account size for individual management is $10 million.

For the year ended March 31, the firm had a $17 million net gain in U.S. institutional tax-exempt business: $15 million for foreign stock and $2 million for foreign bonds.

It has foreign currency hedging capability and has been registered with the SEC since 1984.

The parent company and subsidiaries had $125 billion in total assets under management March 31.

The client contact is Barry Gillman, managing director.

PM Portfolio Management

Friedrichstrasse 9, 8000 Munich 40, West Germany; 89-33-20-36

Total assets managed	$111,000,000
Tax-exempt assets managed:	
Total	$71,000,000
Invested overseas	$71,000,000

PM Portfolio Management managed $71 million in an international account for one U.S. institutional tax-exempt client as of March 31.

Of that, $68.87 million was invested in foreign stocks, $1.42 million was invested in foreign bonds, and $710,000 was invested in cash equivalents.

The equity assets were committed most heavily to Germany, 41.7%; Switzerland, 22.1%; the Netherlands, 10.8%; Spain, 10.3%; and France, 7.3%.

The firm also manages $23.2 million for foreign pension funds.

PM Portfolio Management's conventional and European Small Company Fund managers emphasize high quality, combining growth stocks and bonds. Its market-timing strategy is based on interest rates and currency trends, with special in-depth analysis of strategic investment and industry groups worldwide. All research for clients is done internally.

The minimum account size for individual management is $5 million.

For the year ended March 31, the firm posted a $34.6 million net gain in U.S. institutional tax-exempt business: $34.1 million in foreign stock and $500,000 in foreign bonds.

PM Portfolio has been registered with the SEC since 1980.

The client contacts are Friedhelm Pott or Ulrich R. Kuettner, fund manager.

Provident Capital Management

30 S. 17th St., United Engineers Building, Philadelphia, Pa. 19103; (215) 561-6000

Total assets managed	$3,100,000,000
Tax-exempt assets managed:	
Total	$2,600,000,000
Invested overseas	$20,000,000

Provident Capital Management had $20 million of U.S. institutional tax-exempt assets invested in international accounts for 40 clients as of March 31. All of the assets were invested in foreign stocks.

The equity assets were committed most heavily to Japan, 45%; the United Kingdom, 14%; Germany, 9%; the Netherlands, 7%; and France, 5%.

The firm also managed $22 million for foreign pension funds.

All of the U.S. institutional tax-exempt assets invested abroad were in commingled accounts.

Provident Capital Management follows a low p/e, value-oriented approach. Country allocation resembles EAFE.

The minimum account size for individual management is $5 million.

In the year ended March 31, the firm reported a $20 million net gain in U.S. institutional tax-exempt business for international and global accounts, all in foreign stocks.

It has been registered with the SEC since 1978.

The client contact is M. Andrew Sheffler.

Putnam International Advisors

1 Post Office Square, 10th Floor, Boston, Mass. 02109; (617) 292-1200

Total assets managed	$1,385,000,000
Tax-exempt assets managed:	
Total	$588,000,000
Invested overseas	$588,000,000

Putnam International Advisors, a subsidiary of The Putnam Advisory Co. Inc., which is a wholly owned subsidiary of Marsh & McLennan Inc., managed $588 million in international accounts for 27 U.S. tax-exempt clients as of March 31. Of that, $559 million was in foreign stocks and $29 million in cash equivalents.

The equity assets were most heavily committed to Japan, 35%; France, 10.5%; the United Kingdom, 10%; Germany 8%; and Italy, 7%.

The firm also managed $180 million for foreign pension funds.

Of the assets invested abroad, $131 million was in commingled accounts.

Putnam International uses a top-down and bottom-up approach with the objective of adding value through market and stock selection. It participates in eight to 12 markets to reduce risk, including currency risk. It buys stocks whose present value is attractive in relation to Putnam's expectation for cash earnings, earnings and dividend growth. The investment horizon is 18 to 24 months.

Analysts or portfolio managers are in Boston, London and Tokyo.

Minimum account size for individual management is $10 million.

Net gain in U.S. institutional tax-exempt business Dec. 31, 1984, through March 31 was $135 million, all in foreign stocks.

Putnam has foreign currency hedging capacity, and is registered with the SEC.

The parent company and its subsidiaries managed total assets of $23.48 billion as of March 31.

Client contact is Stephen P. Langer, senior vice president-international equities product manager.

R

RepublicBank Dallas

P.O. Box 241 Dallas, Texas 75221; (214) 922-5857

Total assets managed	$7,718,000,000
Tax-exempt assets managed:	
Total	$5,259,000,000
Invested overseas	$23,000,000

RepublicBank Dallas, a subsidiary of RepublicBank Corp., managed $23 million in international accounts for U.S. tax-exempt clients as of March 31. Of that, $22.4 million was in foreign stocks and $598,000 in cash equivalents.

The equity assets were committed most heavily to Japan, 33%; the United Kingdom, 15.9%; France, 12.8%; Germany, 12.2%; and Sweden, 6.4%.

The entire $23 million was in commingled accounts.

RepublicBank uses an active approach to foreign markets and currencies and to stocks and industries, using top-down and bottom-up investment analysis. Its managers believe long-term success lies in proper country and security selection based on earnings and dividend growth. The overall objective is to maximize return and diversification of risk.

Minimum account size for individual management is $10 million.

Analysts or portfolio managers are in Dallas and Edinburgh, Scotland.

Net gain in U.S. institutional tax-exempt business for the year ended March 31 was $9 million, all in foreign stocks.

The client contacts are David J. Pittman, senior vice president and director-trust corporate marketing, and Vida S. Icenogle, vice president and director-investment marketing.

N.M. Rothschild International Asset Management Ltd.

New Court, St. Swithin's Lane, P.O. Box 185, London, EC4P 4DU, England; 011-441-280-5000

Total assets managed	$1,700,000,000
Tax-exempt assets managed:	

Managers ranked by U.S. tax-exempt assets in international and global accounts

	Name	$ mils.
1.	J.P. Morgan Investment Mgmt.	3,899
2.	Capital Guardian Trust Co.	2,283
3.	Fidelity International	2,130
4.	Templeton International	2,042
5.	First Chicago Investment	1,908
6.	Rowe Price-Fleming	1,718
7.	Morgan Grenfell Investment	1,658
8.	State Street Bank and Trust Co.	1,574
9.	Grantham, Mayo, Van Otterloo	1,561
10.	ABD International Mgmt.	1,300
11.	Baring International	969
12.	G.T. Capital Mgmt. Inc.	959
13.	Schroder Capital Mgmt.[4]	958
14.	N.M. Rothschild International	736
15.	BA Investment Mgmt.	594
16.	Putnam International Advisors	588
17.	Mellon-Pictet International	531
18.	PCM International	525
19.	Bessemer Trust Co.	507
20.	Nomura Capital Mgmt.	494
21.	Citicorp Investment Mgmt.	423
22.	Daiwa International Capital	390
23.	Warburg Investment Mgmt.[3]	346
24.	Kleinwort Benson International	320
25.	Chase Investors Mgmt.	315
26.	IDS International Inc.	265
27.	Lombard Odier International	234
28.	Fiduciary Trust Co. of N.Y.[1]	233
29.	Arnhold & S. Bleichroeder	230
30.	Martin Currie Inc.	185
31.	Brown Brothers Harriman	178
32.	Kemper-Murray Johnstone	178
33.	Capital Mgmt. International	175
34.	Frank Russell Trust Co.[2]	173
35.	Aetna MIM Asset Mgmt. Ltd	150
36.	Julius Baer Investment Mgmt.	143
37.	Scudder, Stevens & Clark	128
38.	American Express Asset Mgmt.	116
39.	Capital Research & Mgmt.	105
40.	Favia Hill & Associates	102
41.	Wellington Mgmt. Co.	102
42.	Batterymarch Financial[4]	101
43.	BEA Associates Inc.	98
44.	BT Investment Mgmt.	98
45.	Wertheim Philippe	94
46.	Thomas J. Herzfeld Advisors	85
47.	Barclays De Zoete Wedd	80
48.	Ivory & Sime International	79
49.	PM Portfolio Mgmt.	71
50.	SBC Portfolio Mgmt.	53
51.	Glenmede Trust Co.	50
52.	Wells Fargo Investment Advisors	50
53.	Nikko & Associates Inc.	42
54.	Van Eck Investments	36
55.	County Investment Mgmt. Ltd.	26
56.	RepublicBank Dallas	23
57.	Wardley Marine International	22
58.	Foreign and Colonial Asset	20
59.	Provident Capital Mgmt.	20
60.	Edinburgh-Wilmington	17
61.	Northern Trust Co.	15
62.	Simms Capital Mgmt.	15
63.	Alliance Capital	13
64.	Alexander, Scriver & Associates	12
65.	Equitable Life Assurance	8
66.	HT Investors Inc.	8
67.	Baillie Gifford (Overseas)	2
68.	AIG Global Investors Inc.	0
69.	European & Pacific Investment	0
70.	Henderson International Inc.	0
71.	Kangyo Kakumaru Capital Mgmt.	0
72.	Merrill Lynch Asset Mgmt.	0
73.	NCNB National Bank	0
74.	New Japan Capital Mgmt.	0
75.	Newport Pacific Mgmt.	0
76.	Touche Remnant Pension Mgmt.	0
77.	Travelers Asset Mgmt.	0
	TOTAL	**32,563**

[1]data as of Dec. 31, 1985
[2]includes Peoples National Bank of Washington
[3]includes C&S Investment Advisors Inc.
[4]includes The Vanguard Group

Total	$736,000,000
Invested overseas	$654,000,000

N.M. Rothschild International Asset Management Ltd., a subsidiary of N.M. Rothschild Asset Management (Holdings) Ltd., had $654 million of U.S. institutional tax-exempt assets invested in international accounts for six clients as of March 31.

Of that, $621.3 million was invested in foreign stocks, $26.16 million in foreign bonds, and $6.54 million in cash equivalents.

The equity assets were most heavily committed to Japan, 44%; France, 14%; Switzerland, 8%; Germany, 7%; and the United Kingdom, 7%.

The equity portion of the $62 million in global accounts was committed most heavily to the United States, 42%; Japan, 23%; France, 7%; Switzerland, 5%; and Germany, 4%.

It also managed $754 million for foreign pension funds March 31.

N.M. Rothschild International aims to add value in currency, market and stock selection. During a market cycle, most value is added by stock selection. There is concentration of selected stocks in selected markets.

Analysts and portfolio managers are stationed in London and Tokyo.

The minimum account size for individual management is $10 million.

The firm has foreign currency hedging capability and has been registered with the SEC since 1980.

The parent company and subsidiaries had total assets of $14 billion March 31.

The client contact is James Heyworth-Dunne, managing director.

Rowe Price-Fleming International Inc.

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2141

Total assets managed	$2,000,000,000
Tax-exempt assets managed:	
Total	$1,718,000,000
Invested overseas	$1,678,000,000

Rowe Price-Fleming International Inc. — a subsidiary of T. Rowe Price Associates, Robert Fleming Holdings and Jardine Fleming and Co. — had $1.678 billion in overseas accounts for 20 U.S. tax-exempt clients as of March 31. Of that, $1.596 billion was invested in foreign stocks, $16.7 million in foreign bonds and $65.4 million in cash equivalents.

The firm had $1.55 billion in international accounts, the equity assets of which were committed most heavily in Japan, 40%; the United Kingdom, 12%; Germany, 9%; France, 9%; and Italy, 7%.

It also had $173.1 million invested in global accounts, the equity assets of which were committed most heavily to Japan, 27%; the United States, 17%; the United Kingdom, 10%; France, 8%; and Germany, 8%.

Of the U.S. tax-exempt assets invested abroad, $13.7 million was in commingled accounts; $561.9 million was in mutual funds.

Rowe Price-Fleming features a flexible approach to international equity management. Maximum attention is accorded to asset allocation, geographical distribution and stock selection. Investments with respect to these three variables are based on disciplined analysis of economic, industry and individual company characteristics and trends.

Analysts or portfolio managers are in London; Baltimore; New York; Tokyo; Hong Kong; Kuala Lumpur, Malaysia; Melbourne and Sydney, Australia; Seoul, Korea; Taipei, Taiwan; the Philippines; Jakarta, Java; Geneva and Zurich, Switzerland; Paris; Frankfurt, W. Germany; and Bahrain.

Minimum account size for individual management is $10 million.

Net gain for the year ended March 31 was $9 million, all in non-U.S. stock.

The firm has foreign currency hedging capability and has been registered with the SEC since 1979.

The parent company and its subsidiary had $45 billion under management as of March 31.

The client contact is George A. Murnaghan.

Frank Russell Trust Co.

First Interstate Plaza, Tacoma, Wash. 98401; (206) 572-2282

Total assets managed	$2,482,000,000
Tax-exempt assets managed:	
Total	$2,482,000,000
Invested overseas	$173,000,000

Frank Russell Trust Co., an affiliate of Frank Russell Co., had invested $173 million in overseas markets for 136 U.S. tax-exempt clients as of March 31, all of which was invested in foreign stock through commingled accounts.

The equity assets were most heavily committed to two funds. The $123.77 million International I Fund was committed to Japan, 26%; the United Kingdom, 12%; Canada, 8%; Australia, 9%; and Germany, 9%. The $49.23 million International II Fund was committed to the Pacific Basin.

Frank Russell Trust offers two international funds for plan sponsors wanting to diversify beyond U.S. capital markets. Emphasis is on equity investments in major Pacific Basin and European countries. The funds are designed to benefit from the emerging strength of multinational companies and the internationalization of world markets.

Minimum account size for individual management is $1 million.

Net gain for the year ended March 31 was $81.07 million, all of which was for foreign stock.

It has non-U.S. currency hedging capability.

Total assets under management by the parent company and its subsidiaries was $4.567 billion March 31.

Client contact is Paul R. Kaltinick.

S

SBC Portfolio Management International Inc.

1 World Trade Center, Suite 9051, New York, N.Y. 10048; (212) 938-7465

Total assets managed	$282,000,000
Tax-exempt assets managed:	
Total	$58,000,000
Invested overseas	$43,000,000

SBC Portfolio Management International Inc., a subsidiary of Swiss Bank Corp., Basel, Switzerland, invested $43 million in overseas markets for five U.S. tax-exempt clients as of March 31. Of that, $42 million was invested in foreign stocks and $1 million in cash equivalents.

The firm managed $43 million in international accounts, the equity assets of which were committed most heavily to Japan, 51%; the United Kingdom, 10%; Spain, 9%; France, 6%; and Germany, 6%.

It also managed $10 million in global accounts, the equity assets of which were committed most heavily to the United States, 41%; Japan, 27%; the United Kingdom, 5%; Spain, 5%; and Germany, 3%.

Of the total assets under management, $224 million was for non-U.S. pension funds.

SBC uses a top-down, equity-oriented process for foreign investments combining its strength in economic and currency forecasting with expertise in fundamental stock valuation.

Minimum account size for individual management is $5 million.

Analysts or portfolio mangers are in Australia, Hong Kong, the United Kingdom, the United States, Switzerland, Japan and Singapore.

Net gain in U.S. institutional tax-exempt business for the year ended March 31 was $23 million, all of which was for foreign stock.

SBC has foreign currency hedging capability and has been registered with the SEC since 1982.

The client contacts are John W. Conlin and Rita J. Kleinman.

Schroder Capital Management International

1 State St., New York, N.Y. 10004; (212) 269-6500

Total assets managed	$1,285,000,000
Tax-exempt assets managed:	
Total	$958,000,000
Invested overseas	$958,000,000

Schroder Capital Management International, a subsidiary of Schroders PLC, London, managed $958 million in international and global accounts for 14 U.S. tax-exempt clients as of March 31. Of that, $901 million was invested in foreign stocks and $57 million in foreign bonds.

The firm managed $859 million in international accounts, the equity assets of which were committed most heavily to Japan, 45%; the United Kingdom, 15%; Germany, 9%; Switzerland, 7%; and France, 7%.

The firm also managed $99 million in global accounts, the equity assets of which were committed most heavily to Japan, 42%; the United Kingdom, 14%; Germany, 9%; Switzerland, 9%; and France, 6%.

Of total assets under management, $327 million was for non-U.S. pension funds.

Country allocation begins Schroder's investment process, with emphasis on stock selection in countries with the best economic prospects. Broad guidelines for country investment are based on two-year economic projections in order to quantify longer-term market opportunities. Within these guidelines, current asset allocation is determined based on shorter-term market considerations.

Schroders takes an active and aggressive approach to stock selection, with emerging growth stocks comprising the portfolios' cores.

Analysts or portfolio managers are in London; New York; Zurich, Switzerland; Tokyo; Hong Kong; Singapore; and Sydney, Australia.

Minimum account size for individual management is $5 million.

Net gain in U.S. tax-exempt institutional business for the year ended March 31 was $57 million, all for non-U.S. stock.

The firm has foreign currency hedging capability and has been registered with the SEC since 1980.

Total assets under management by the parent company and its subsidiaries was $16 billion as of Dec. 31.

The client contact is Sharon L. Haugh, first vice president and director-international marketing.

Scudder, Stevens & Clark

345 Park Ave., New York, N.Y. 10154; (212) 350-8200

Total assets managed	$31,508,000,000
Tax-exempt assets managed:	
Total	$11,726,000,000
Invested overseas	$464,000,000

Scudder, Stevens & Clark had $464 million in tax-exempt assets under management in non-U.S. markets as of March 31.

Separately managed international accounts for six U.S. tax-exempt clients held $122 million. Two separately managed global accounts held $5.7 million. The remaining $340 million represented the portion of domestic portfolios invested overseas.

In addition, a major portion of the $595 Scudder International Fund represents investments by U.S. tax-exempt clients.

International equity assets were committed most heavily to Japan, 23%; the United Kingdom, 14%; France, 9%; Belgium, 8%; and Germany, 8%. Global equity assets were committed most heavily to the United States, 37%; Japan, 30%; the United Kingdom, 13%; Belgium, 12%; and the Netherlands, 8%.

The firm's investment approach is both top-down and bottom-up. In-depth security analysis is meshed with global economic assessments and local market and currency factors.

Analysts or portfolio managers are in New York, Boston and Los Angeles.

Minimum account size for individual management is $5 million.

Additional tax-exempt money is managed in the Japan Fund and the Korea Fund.

The firm has foreign currency hedging capability and has been registered with the SEC since 1940.

Client contact is Victoria Herget, principal, at (312) 861-2700.

Simms Capital Management

7 E. 76th St., New York, N.Y. 10021; (212) 861-2830

Total assets managed	$201,000,000
Tax-exempt assets managed:	
Total	$47,000,000
Invested overseas	$5,000,000

As of March 31, Simms Capital Management Ltd. had $5.2 million invested in overseas equity markets for one tax-exempt U.S. institutional client.

The firm also had $15.2 million in global accounts, the equity assets of which were committed most heavily to the United States, 35%; Japan, 29%; France, 9%; Italy, 7%; and Belgium, 4%. The firm's investment approach blends macroeconomic country allocation with growth and value-oriented security selection. The process begins with a macroeconomic and financial market overview, and within that framework rigorous growth and value criteria are applied for individual security selection.

Minimum account size for individual management is $10 million.

Net gain for the year ended March 31 for U.S. institutional tax-exempt business was $15.2 million, all of which was in foreign stocks.

The firm has foreign currency hedging capability and has been registered with the SEC since 1984.

Client contact is Arthur Williams III.

State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 786-3000

Total assets managed	$17,566,000,000
Tax-exempt assets managed:	
Total	$14,895,000,000
Invested overseas	$1,574,000,000

State Street Bank and Trust Co., a subsidiary of State Street Boston Corp., managed $1.574 billion in international accounts for 19 U.S. tax-exempt institutional clients as of March 31. Of that, $1.566 billion was invested in foreign stocks and $8 million in cash equivalents.

The equity assets were committed most heavily to Japan, 49%; the United Kingdom, 16.9%; Germany 9.2%; France, 4.2%; and Italy, 4.1%.

The bank also had $171 million under management for non-U.S. pension funds.

Of the U.S. tax-exempt assets invested abroad, $437.2 million was in commingled accounts and $1.574 billion in index funds.

State Street's investment approach is to offer flexible, quantitatively driven funds based on the EAFE. These include index funds designed to replicate EAFE; country selection funds which index to selected country markets; and high-value portfolios, which weight countries and industries the same as EAFE but invest only in about one-third of the issues, based primarily on price to cash flow, earnings and book value. Combinations are available.

Minimum account size for individual management is $10 million.

Net gain in U.S. tax-exempt institutional business for the year ended March 31 was $545.8 million.

State Street has foreign currency hedging capability.

Client contact is Harry Sterling, vice president, at (617) 654-3236.

t

Templeton International

P.O. Box N-7776 Lyford Cay, Nassau, Bahamas; (809) 326-4600

Total assets managed	$8,558,000,000
Tax-exempt assets managed:	
Total	$2,042,000,000
Invested overseas	$2,042,000,000

Templeton International, a subsidiary of Templeton, Galbraith & Hansberger Ltd., has $2.042 billion of U.S. institutional tax-exempt assets invested in global accounts for 82 clients.

The equity assets of the accounts were most heavily committed to the United States, 60%; Canada, 9.5%; Australia and New Zealand, 9%; the

We are pleased to announce that

GIRISH V. REDDY

has joined our firm as

Senior Vice President

LELAND O'BRIEN RUBINSTEIN ASSOCIATES, INCORPORATED
707 Wilshire Boulevard
Los Angeles, CA 90017

Far East, 4%; and the Netherlands, 4%. The firm has $102 million of U.S. tax-exempt assets invested in mutual funds.

The Templeton investment approach is based on fundamental research and analysis. Research is worldwide and governed by three elements: security valuation levels are determined using a five- to six-year time range; assurance is made that growth and value are not mutually exclusive; the approach is flexible in so much as new methods of evaluating securities are constantly being tested.

The minimum account size for individual management is $10 million.

It has analysts or portfolio managers in Fort Lauderdale, Fla., Nassau and London.

In the year ended March 31, Templeton International reported a $913 million net gain, entirely for foreign stocks.

The firm's parent company and subsidiaries had $8.558 billion in total assets under management as of March 31.

The client contact is Kenneth Scislaw, marketing/new business division.

Touche Remnant Pension Fund Management Ltd.

Mermaid House, 2 Puddle Dock, London, England EC4V 3AT; 011-441-236-6565

Total assets managed $1,650,000,000

Touche Remnant Pension Fund Management Ltd. presently does not manage any foreign assets for U.S. tax-exempt clients.

Its active investment approach is equity-oriented, emphasizing asset allocation among major world markets, with security selection favoring growth companies supported by capable management and strong balance sheets, regardless of size. Currency hedging is undertaken when appropriate.

Minimum account size for individual management is $5 million.

The firm has a non-U.S. currency hedging capability. It has been registered with the SEC since 1981.

The parent company, Touche Remnant Holdings Ltd., and subsidiaries had $5.2 billion under management as of March 31.

Client contact is David H. Carter, director.

Travelers Asset Management International Corp.

122 E. 42nd St., Suite 3506, New York, N.Y. 10017; (212) 867-6233

Total assets managed $1,096,000,000

Travelers Asset Management International Corp., a subsidiary of The Travelers Corp., invests in U.S. domestic and Eurodollar fixed-income securities on behalf of offshore and U.S.-based taxable insurance companies.

Its primary strategy is interest rate anticipation carried out with an orientation toward intermediate securities and limited principal risk through the use of Eurodollar fixed- and floating-rate issues.

It has the ability to hedge non-U.S. dollar investments in the forward foreign exchange markets and has been registered with the SEC since 1982.

The client contact is Werner R. Genieser, senior vice president.

V

Van Eck Investments

122 E. 42nd St., New York, N.Y. 10168; (212) 687-5200

Total assets managed	$40,000,000
Tax-exempt assets managed:	
Total	$40,000,000
Invested overseas	$36,000,000

Van Eck Investments, a subsidiary of Van Eck Financial Services, had $40 million in tax-exempt assets under management as of March 31. Of that, one client: $32 million in foreign stocks and and $4 million in cash equivalents.

The firm's investment philosophy is to identify long-term trends and translate them into investment themes in the structuring of a portfolio. Global industry studies are used to compare companies as a bottom-up approach that complements the identification of trends.

Minimum account size for individual management is $1 million.

The firm has foreign hedging capability and has been registered with the SEC since 1985.

Total assets under management by the parent company and its subsidiaries totaled $800 million March 31.

Client contact is William D. Jones.

W

Warburg Investment Management International

33 King William St., London EC4R 9AS, England; 011-44-1-280-2474

Total assets managed	$459,000,000
Tax-exempt assets managed:	
Total	$346,000,000
Invested overseas	$338,000,000

Warburg Investment Management International Ltd., a subsidiary of Mercury Asset Management Ltd., London, invested $337.6 million of U.S. institutional tax-exempt assets in foreign markets for 11 clients as of March 31. Of that, $327.2 million was in foreign stocks and $10.4 million was in cash equivalents.

The equity assets of the firm's $325.7 million in international accounts were committed most heavily to Japan, 45%; West Germany, 11%; Switzerland, 9%; France, 7%; and Italy, 6%.

Equities of the firm's $19.9 million in global accounts were committed most heavily to the United States, 34%; Japan, 24%; Germany, 10%; Switzerland, 7%; and France, 4%.

The firm also managed $13 million for foreign pension funds March 31.

The firm had $130.1 million of U.S. tax-exempt assets in mutual funds.

Warburg Investment is an active international investment manager using a combination of top-down and bottom-up techniques. Organizational strength and substantial research are stressed.

It has analysts or portfolio managers in London and Tokyo.

Minimum account size for individual management is $5 million.

For the year ended March 31, Warburg reported a net gain of $83.8 million in U.S. tax-exempt institutional business: $23.3 million for foreign stock and $60.5 million for foreign bonds.

The firm has foreign currency hedging capability and has been registered with the SEC since 1976.

The parent company and subsidiaries had total assets of $18 billion under management March 31.

The client contact is John G. Townsend, in New York at (212) 415-1925.

Wardley Marine International Investment Management

250 Park Ave., New York, N.Y. 10177; (212) 503-2741

Total assets managed	$121,000,000
Tax-exempt assets managed:	
Total	$22,000,000
Invested overseas	$22,000,000

Wardley Marine International Investment Management Ltd., a subsidiary of Wardley Investment Services Ltd./Marine Midland Bank Inc., Hong Kong, had $21.6 million of U.S. institutional tax-exempt assets invested in an international account for one client as of March 31. All of that was in foreign stocks.

The assets were committed most heavily to Japan, 34%; the United Kingdom, 15%; France, 10%; Italy, 10%; and Germany, 10%.

The firm also managed $34.5 million

All of the tax-exempt U.S. assets invested abroad were in commingled accounts.

Wardley Marine, a top-down investor, emphasizes geographic/currency allocation. The managers are value-oriented fundamentalists who seek to purchase stocks with outstanding earnings growth potential.

Portfolio managers or analysts are in London, Hong Kong, Australia, Japan, Singapore and New York.

The minimum account size for individual management is $5 million.

The firm has foreign currency hedging capability and has been registered with the SEC since 1982.

The parents and subsidiaries had $7 billion under management March 31.

Client contact is Deborah G. George.

Wellington Management Co./Thorndike, Doran, Paine & Lewis

28 State St., Boston, Mass. 02109; (617) 742-8100

Total assets managed	$25,810,000,000
Tax-exempt assets managed:	
Total	$8,079,000,000
Invested overseas	$295,000,000

Wellington Management Co./Thorndike, Doran, Paine & Lewis invested $295.2 million in overseas markets for 83 U.S. tax-exempt clients as of March 31. Of that, $284.3 million was invested in foreign stocks, $7.5 million in foreign bonds and $3.4 million in cash equivalents.

The firm managed $101.7 million in international accounts, the equity assets of which were committed most heavily to France, 17.8%; Germany, 7.8%; Japan, 29.7%; the Netherlands, 9.7%; and Switzerland, 8.8%.

Of the U.S. tax-exempt assets invested abroad, $34.6 million was in commingled accounts.

Wellington Management purchases international equities from a diversified and dynamic universe of foreign growth companies based on fundamental company analysis and country valuation. International bond portfolios emphasize asset allocation among bond markets of various countries based on relative country valuations.

Portfolio managers and analysts are in London, Boston, Atlanta and Valley Forge, Pa..

Minimum account size for individual management is $10 million.

Net gain in U.S. tax-exempt institutional business for the year ended March 31 was $4.7 million: $2.7 million for foreign stock and $2 million for foreign bonds.

The firm has foreign currency hedging capability and has been registered with the SEC since 1960.

Client contact is Dena G. Willmore, senior vice president.

Wells Fargo Investment Advisors

50 California St., San Francisco, Calif. 94111; (415) 434-6024/6025

Total assets managed	$33,569,000,000
Tax-exempt assets managed:	
Total	$32,441,000,000
Invested overseas	$50,000,000

Wells Fargo Investment Advisors, a subsidiary of Wells Fargo and Co., had $50 million of U.S. institutional tax-exempt assets invested in global accounts for two clients as of March 31. All of those assets were in foreign stocks.

The global accounts were most heavily committed to Japan, 54.7%; the United Kingdom, 18.4%; Germany, 9.6%; France, 4.8%; and Switzerland, 4.1%.

The firm also had $104 million under management for foreign pension funds.

All of the U.S. tax-exempt assets invested abroad were in index funds.

Wells Fargo Investment Advisors approaches international investment through the use of an index fund that holds more than 600 non-U.S. stocks, representing the nine most highly capitalized countries (excluding Italy) in which U.S. capital investment is deemed prudent. This approach offers returns of a broad group of foreign equity markets and reduces total portfolio risk.

The minimum account size for individual management is $100 million.

The firm has been registered with the SEC since 1985.

The parent and subsidiaries had $34.79 billion under management as of March 31.

The client contacts are Michael J. Henman and Thomas A. Middleton, vice presidents.

Wertheim Philippe International

230 Park Ave., New York, N.Y. 10169; (212) 370-6140

Total assets managed	$449,000,000
Tax-exempt assets managed:	
Total	$94,000,000
Invested overseas	$77,000,000

Wertheim Philippe International, a joint venture between Wertheim Asset Management and the Philippe Group, managed $77 million in overseas markets for three U.S. tax-exempt clients as of March 31. All of the assets were in foreign stocks.

The firm managed $94.4 million in global accounts, the equity assets of which were most heavily committed to Japan, 26%; the United States, 16%; Germany, 11%; the United Kingdom, 10%; and the Netherlands, 7%.

Of the total assets under management, $381.6 million was for non-U.S. pension funds.

Wertheim Philippe uses a top-down and bottom-up methodology. Equal weight is placed on country, sector and stock decisions. Moderate use is made of cash equivalents. Portfolios are diversified with about 100 securities, and about one-third of the holdings are in small-capitalization issues.

Analysts or portfolio managers are in New York, Paris and Luxembourg.

Minimum account size for individual management is $10 million.

Net gain for U.S. tax-exempt institutional business for the year ended March 31 was $58 million, all in non-U.S. stock.

The firm has been registered with the SEC since 1982.

Assets under management by the parents and subsidiaries totaled $2.122 billion as of March 31.

The client contact is Steven W. Golann, managing director.

Custodians . . .

Continued from page 15

don office.

"Basically, the global custodian provides settlement of securities transactions, safe keeping and reporting services of all overseas transactions," Mr. Kay said. "The master trustee is effectively the record keeper for the pension fund."

"The global custodian can make the difference between a successful and an unsuccessful international investment program," said Ron Golz, executive vice president of State Street Bank.

"Because the sponsor who decides to invest overseas for the first time is walking into unexplored water, the role the global custodian plays is to guide him through those waters," he said. "Settlement procedures are different in every country and corporate actions are different."

Mr. Golz noted the settlement process in the United States is relatively efficient.

"Every trade is settled within five days and one deals in the same language and currency," he said. "Also, corporate actions are well monitored; automated depositories eliminate physical delivery or re-registration of securities.

"We are spoiled in the U.S. and we feel it must be the same overseas. But in Hong Kong, things are settled the next day. In the U.K., it's done in two weeks. In Australia, there is no scheduled settlement date, it settles when delivered . . .

"Why should the plan sponsor be worried about all this plumbing? (That) is what a global custodian is paid to worry about. If we're doing our job right, the client thinks the international markets are as efficient as our own."

American Can's Mr. Kelly emphasized it pays to take time in seeking a global custodian.

"It pays to shop for services. The fees charged can vary greatly on trustees," he said. "It does pay to comparison shop."

The complex nature of the global custodian's work can cause the fees to be higher than they are for domestic custody, said Chase's Mr. Kay.

"The starting point for basic global custodial service is around 18 basis points (of the assets in global custody) for the provision of accounting and valuation in multicurrencies, which pension funds need," he said. "Often global custodians will have a fee schedule starting at around 25 to 26 basis points."

In most cases, global custodians offer a decremental fee scale: The more assets held in custody, the less will be the fees.

"This could take the overall cost down into the 12 to 15 basis point range," Mr. Kay said.

"The global custodian has to pay transaction charges associated with a particular market. These are absorbed by the custodian so the cost of services can depend on the country breakdown desired by the client."

Ms. Debatin, the international consultant, emphasized it is important for pension fund executives to seek a good match between their needs and what the global custodian offers.

"When I'm doing a master trust selection and the fund has an international element, I know one of the key items will be global custody," she said. "Then I have to figure out who has a product and a service."

In the top group, she looks for quality of agent network, experience, and whether the bank has on-line systems so the client can go to a manager and look at the portfolio, she said.

"The client has to understand that not only does a global custodian settle through the agent network, but (the custodian also) should be providing performance measurement on international or global portfolios," she said.

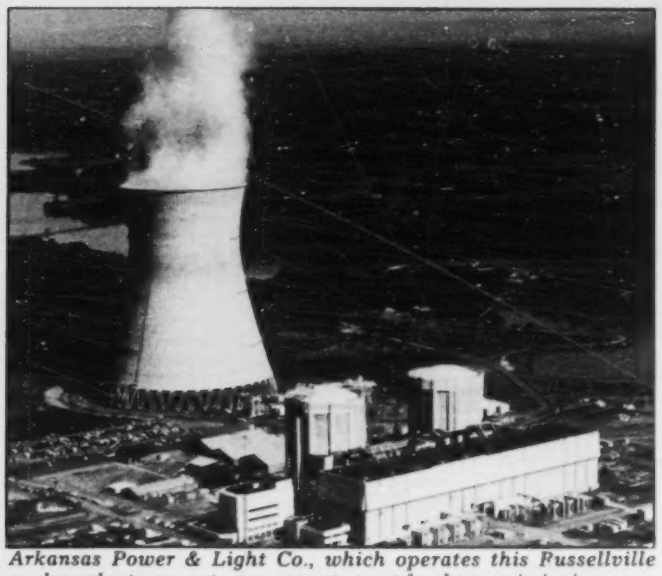
2 join to launch management firm

Credit Commercial de France, a major French bank, and MacKay-Shields Financial Corp., New York, have formed a joint international money management venture, CM International Associates Ltd., said John O'Brien, president

The firm will open its main office in London later this year. Juan de Liedekerke will be president and chief executive officer.

It will manage tax-exempt assets for U.S. pension funds, insurance companies and assets

Cash Management



Arkansas Power & Light Co., which operates this Russellville nuclear plant, may set up a separate trust for decommissioning.

Utilities start funds for plant shutdowns

By Chuck Paustian

Electric utility companies are amassing millions of dollars in separate accounts designated to meet the future costs of decommissioning their nuclear power plants.

The various state public service commissions require the utilities to accumulate, during the life of the facility, the necessary funds for dismantling the nuclear units.

Although current funding requirements vary from state to state, the establishment of special accounts, segregated from the rest of the company's assets, is growing in popularity.

- Florida Power & Light Co., Miami, internally manages a $52 million trust designated for decommissioning four nuclear units, said E.L. Hoffman, assistant treasurer.
- Louisiana Power & Light Co., New Orleans, has proposed setting up an external trust fund to meet the decommissioning costs for its reactor, said E.W. Tregre, public information manager.
- Arkansas Power & Light Co., Little Rock, is reviewing its funding method and considering setting up a separate trust and possibly moving the assets to external managers, said John J. Harton, vice president, treasurer and assistant secretary.

Some investment management firms, such as BEA Associates Inc., New York, are looking at these pools of capital as sources of new business.

These assets differ from typical corporate cash accounts in that the investment horizon covers a much longer time period.

Apparently, there is no one source of just how much money has been accumulated for decommissioning.

Ted Gradin, director of finance at the Edison Electric Institute, Washington, said a 1983 paper estimated the cost of decommissioning, in 1983 dollars, was about $100 million per nuclear unit, based on current technology and practices.

Mr. Gradin also said that cost, carried out at a rate of 7% annually for 30 years, would grow to about $750 million per unit.

Now, 102 reactors have been built and would require decommissioning. Sixteen reactors are in various stages of construction.

During the life of those 118 nuclear units, utility companies would amass a total of about $88.5 billion for decommissioning.

(Not every utility sets up separate trust funds for decommissioning. Industry experts, however, said the separate trusts are becoming more prevalent.)

The relative youth of the nuclear industry, however, creates a number of uncertainties regarding the reactors. Because of this, companies are required to plan for the decommissioning as soon as the units become commercially operative.

A number of states, including Wisconsin, Connecticut, Missouri, Virginia and Pennsylvania, require utility companies to segregate the decommissioning funds from other corporate assets in external trusts.

Other states, such as Florida, require the assets be placed in a separate trust, but the trust can remain within the company.

Steven Kihm, financial economist with the Public Service Commission of Wisconsin, said the state prefers the separate trusts because of the uncertainty the future holds.

"If (the utilities) do get into trouble, we'd like to have that money in trust," he said. Wisconsin was one of the first states to require utilities to separate the decommissioning assets into an external trust fund.

Mr. Kihm said some states do not require the company to segregate assets into trust funds.

"It's usually run through depreciation as a negative salvage amount," he said. This accounting technique allows the company to improve its cash flow and reduce the need to borrow capital.

"They use the money to build assets free and clear of debt. When decommissioning comes, they can use those assets to borrow the cost of the decommissioning.

"We had a problem with that because it assumes an on-going concern."

Mr. Kihm also said those assets

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Electronic system revs up

Automakers are on the road to paperless payments

By Barry B. Burr

The three major automobile companies are beginning to move to more paperless communications with their suppliers, although only General Motors Corp., Detroit, is close to putting its vendors on an electronic payment system to eliminate paying by check.

The companies are going at various paces and are pursuing different paths toward making communications with suppliers completely electronic, from purchase orders and invoicing to payment and remittance information.

- Chrysler Corp., Detroit, has a campaign to get major suppliers to send invoices electronically, according to Henry Nauka, general supervisor-accounts payable.
- Ford Motor Co., Dearborn, Mich., has been eliminating invoices entirely for more than a year at its body and assembly operations. Instead, it pays suppliers by reconciling purchase orders and advance shipping notices, both of which are sent electronically between the company and suppliers at 1,300 locations, said Edward N. Wong, production control specialist.
- General Motors has four suppliers on an experimental electronic payment and remittance information system, operated through the First National Bank of Chicago, according to industry sources. They said the company expects to put all suppliers on the system soon (*Pensions & Investment Age*, July 21). GM and First Chicago officials declined to comment.

According to suppliers and other industry officials, obstacles in implementing the system center largely on devising a standard for the industry, and eventually for all business, and renegotiating terms of payments sent electronically instead of by check.

Without an industry standard, each supplier would have to use different electronic formats to communicate the same information with each purchaser, a deterrent to the adoption of a paperless system, according to Michael Gerus, communications facilitator of the Detroit-based Auto Industry Action Group, which was organized five years ago to improve the competitiveness of the North American auto industry.

The automakers, along with other vehicle manufacturers, such as Caterpillar Tractor Co., parts suppliers and bankers, have been meeting together as members of the Auto Industry Action Group to devise common standards for communicating supplier-related information electronically.

"We are developing a standard way of electronically communicating the same information from one company to another," said Dennis M. Dupre, manager-general accounting, Holley Automotive Division, Warren, Mich., a supplier.

The AIAG isn't looking to standardize renegotiating paper-based payment terms for electronic payments, he added, saying each supplier would continue to negotiate its own terms with the companies.

GM possibly could adopt payment terms used by its GM Canada Ltd. subsidiary.

Its Oshawa, Ontario-based unit first began a program to pay Canadian suppliers electronically in January 1984, according to Richard Crouse, general supervisor-disbursement controls at GM Canada. About 75% of its Canadian suppliers are on the system.

He said GM Canada renegotiated terms on the availability of funds across the board "to protect our float from the loss of mail time." It customarily pays suppliers, both those receiving payments electronically and by check, on the 25th of each month. But GM Canada doesn't allow electronic recipients availability of funds until opening of business on the 28th, or if it falls on a weekend or holiday, on the first working day afterward.

Because many suppliers continue to receive payment by check,

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Citicorp notes set new standard

By Barry B. Burr

NEW YORK — Citicorp has adapted the concept of longer-term floating-rate notes to break new ground in commercial paper.

In two recent issues of $250 million each, Citicorp tied the yields to floating rates and sold the paper at par, paying interest monthly instead of by discounting the price.

According to Wayne R. Gorman, vice president, the Citicorp issues were the first of their kind, providing longer-term funding in a market dominated by shorter-term-oriented investors.

A major commercial paper issuer who was not involved with the Citicorp deals said the issues appear to adapt to the public market floating-rate terms typically available from master notes, which are essentially short-term privately placed borrowings with bank trust departments.

But Mr. Gorman said, "I would say the issues adapted the concept of longer-term floating-rate notes, rather than master notes."

As he and others noted, the Citicorp issues, unlike master notes, guarantee funding until maturity, besides being publicly tradable.

Citicorp sold within three days in July two similar issues of 270-day paper — one whose yield is adjusted daily, the other whose yield is adjusted every 30 days.

Mr. Gorman estimates the immediate result of the new issues was that Citicorp paid three basis points more in yield on the daily adjustable and three to five basis points more on the monthly adjustable than it would have had it issued overnight and 30-day commercial paper.

"That's the price I pay for 270-day liquidity," he said.

"What I needed was long-term liquidity with short-term rate

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Payden & Rygel index of short maturity assets*
(for month ended June 30)

	June 1986	Quarter ended 6/30/86	Year to date	12 months ended 6/30/86	Yield level monthly change*
	Unannualized total returns				
90-day					
U.S. Treasury bill	0.5910	1.6779	3.6340	7.5412	−36
Domestic CD	0.6043	1.8351	3.9083	8.0830	−23
Euro $ CD	0.6286	1.8711	3.9803	8.2319	−30
180-day					
U.S. Treasury bill	0.7447	1.7909	4.0241	8.0756	−48
Domestic CD	0.6853	1.9687	4.1627	8.3506	−31
Euro $ CD	0.7381	2.0111	4.2098	8.5101	−40
1-year					
U.S. Treasury note	0.9774	1.9571	4.6571	9.0178	−47
2-year					
U.S. Treasury note	1.5777	1.9575	5.8903	11.9873	−85

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. 90- and 180-day Treasury bill yield level changes on discount basis.
*Basis points.
Source: Payden & Rygel, Los Angeles

Institutional investors feel impact

Senate tax bill to affect mutual funds

By Richard J. Gillespie

WASHINGTON — Mutual fund performance will be impaired and fund costs increased by little-noticed provisions slipped into the Senate tax bill, industry officials say.

Mutual funds have become increasingly popular retirement vehicles, particularly with the rise of 401(k) plans and individual retirement accounts. *Pensions & Investment Age* estimates institutional investors poured $35 billion into mutual funds, as of March 31.

A Senate proposal to make mutual funds conform to the calendar year, although primarily an obstacle to mutual-fund administration, also would affect institutional investors, the mutual fund officials said.

They said added costs would boost mutual fund fees, which are subtracted from investment returns. In addition, mutual funds could be forced to freeze investment activity for the month of December to close out their books without chalking up new realized gains or losses.

Or, funds could try fine tuning their distributions to avoid one potential tax problem, but could risk loss of their tax qualification if they are substantially off.

The Senate proposal will create an "impossible" administrative burden, and affect investment performance, according to William J. Nutt, senior executive vice president of The Boston Co. Inc., Boston, which administers 102 funds with a total of $35 billion.

"It will simply jam up the works in the back office of brokerage firms, and mutual funds will become a much less attractive product because of that," he said.

"I can appreciate why the provision is being considered, but for all of us with large mutual fund complexes, our accountants and lawyers stagger the fiscal years of our funds to be able to sequence the work in an efficient manner. If everybody is forced to have the same fiscal year, it will make it very difficult," said Dozier Gardner, president of Eaton Vance Management, Boston, which has $4 billion under management and 24 mutual funds.

Mutual funds now have different fiscal years, often deliberately to spread out their administrative work load, which he said also benefited the regulatory agencies and the U.S. mails.

But a provision contained in the Senate's version of the tax overnaul bill mandates all regulated investment companies adopt a calendar year for taxable years beginning after Dec. 31, 1986.

The Senate and House versions are now being hammered into one bill in a conference committee.

A second provision would impose a 5% non-deductible excise tax on investors' so-called "spillover" dividends, which are paid out for the time between when the fund's fiscal year and the calendar year end.

While the proposals would be "entirely tax neutral," Mr. Nutt warned they would create an enormous December peak in the work load, not just for mutual fund sponsors, but also for the Securities and Exchange Commission, the Internal Revenue Service and even the U.S. Postal Service.

Far from simplifying the tax system, the two proposals would overcomplicate it, according to Mr. Nutt.

"Unlike a corporation or an individual (which get up to five months to calculate taxes), a mutual fund would be expected to compute its taxable income between 4:30 p.m. and (midnight) on Dec. 31. Despite all the advances we have had in computing and accounting, this is simply impossible to do," he said.

The excise tax on spillover dividends, he said, was intended to represent a kind of interest charge paid to the U.S. Treasury and related to the delay in receipt of taxable income.

Mutual funds pay spillover dividends because, under current tax law, they must pay out more than 90% of income and capital gains in a calendar year or lose their tax status.

A mutual fund whose year ends Nov. 30 then might pay out a "spillover" dividend in January to reconcile its books with the tax law. But the dividend paid out is not taxed until the following year.

The provision seeks to minimize the delay in the federal government's receipt of taxes by forcing mutual funds into compliance through the excise tax, Mr. Nutt said.

"This is not a one-time tax, but rather an on-going, continuous penalty for not being able to predict the future exactly," said Mr. Nutt, who is on the board of governors of the Investment Company Institute, the mutual fund trade group based in Washington.

"Failure to calculate and distribute sufficient income (by midnight Dec. 31) would result in a 5% penalty tax, which would be non-deductible in arriving at taxable income.

"If the calculation in the pre-midnight hours turns out to be too high, an overdistribution would result. Such overdistribution would burden the shareholders with recordkeeping related to tax-basis adjustments."

If a fund is frozen in December, no capital gains or losses would be realized for the month, in which case it would be much easier to calculate income, gains and losses for the year Nov. 30.

"This alternative leaves the fund and its shareholders in a very vulnerable position with a frozen portfolio, which could be dramatically affected by market changes," he said.

A second option would be to try to more closely estimate distributions to avoid paying spillover dividend, he said.

"However, if a fund underestimates its income and gain and thus the amount paid in December, it might lose its tax qualification as a regulated investment company. Even if it did, it would be subject to tax on the distributable income and net capital gains that it did not pay out in December," he said.

Another tax reform proposal also affects the tax deductibility of mutual fund expenses, including investment advisory fees.

While it is not certain how this third proposal would work, it is possible that taxable mutual fund shareholders would be taxed on their pro rata share of gross income, rather than dividends received.

According to Mr. Nutt, the mutual fund industry has a good chance of knocking down the proposals.

He said that a representative of the mutual fund industry had recently met with Rep. Charles B. Rangel, D-N.Y., and Rep. Ronnie G. Flippo, D-Ala., to discuss the provisions.

Gas Works proceeds on restructuring

PHILADELPHIA — Trustees of the $167 million Philadelphia Gas Works Retirement Reserve Fund will restructure the fund even though they can't obtain fiduciary liability insurance.

Curtis O. Townsend, deputy director of finance-pension fund asset manager for the city, said the members of the Sinking Fund Commission, which oversees the investment of the fund, unanimously decided they were sufficiently covered.

He said Harold Polt, chairman of the commission, decided the fiduciary liability insurance he had as chief executive officer of Fidelity Bank, Philadelphia, was adequate. The other two members of the commission are covered by insurance provided by the city.

Trustees had postponed the restructuring because they couldn't get insurance coverage (*Pensions & Investment Age*, April 28).

Mr. Townsend said the fund will hire six new investment managers, for a total of $131.2 million.

Four managers will be hired for equity portfolios of $15.8 million each: Pilgrim, Baxter, Hoyt & Greig, Wayne, Pa.; Dawson-Henry Capital Management, New York; Morgan Stanley Asset Management Inc., New York; and First Pennsylvania Bank, Philadelphia.

Two will be hired for bond portfolios of $34 million each: Fidelity Bank and First Boston Asset Management, New York.

Miller, Anderson & Sherrerd, Bala Cynwyd, Pa., which had been the fund's lone external manager, is being retained to run a $20 million equity portfolio.

The assets allocated to the new managers previously had been managed internally.

The balance of the fund's assets, about $15 million, is earmarked for future investment in alternative asset classes, he said. ■

100 largest investment institutions ($ mil.)

Because of computer difficulties, the listing of the 100 largest financial institutions, published July 7, was incorrect. Below is the correct list. The assets shown are as of Jan. 1 and include subsidiaries.

1.	Prudential Insurance Co.	123,200
2.	Metropolitan Life Insurance	94,080
3.	Equitable Life Assurance	91,400
4.	Chase Manhattan Corp.	87,687
5.	Aetna Life and Casualty	83,484
6.	American Express	74,777
7.	Merrill Lynch & Co.	58,774
8.	Security Pacific Corp.	53,600
9.	Citicorp	49,700
10.	Wellington Mgmt./TDP&L	48,245
11.	Bankers Trust	46,860
12.	Travelers Insurance Co.	45,254
13.	TIAA-CREF	45,000
14.	FMR Corp.	40,000
15.	J.P. Morgan & Co.	39,843
16.	CIGNA Corp.	39,000
17.	John Hancock Mutual Life	37,088
18.	Mellon Bank	34,240
19.	Wells Fargo & Co.	33,546
20.	Sears Roebuck*	32,786
21.	California Public Employees	32,700
22.	Wachovia Bank	31,786
23.	Dreyfus Group	31,000
24.	New York Life Insurance	31,000
25.	State Farm Group	30,000
26.	New England Mutual Life	29,379
27.	Scudder Stevens & Clark	28,530
28.	Kemper Corp.	28,355
29.	N.Y. State Common Fund	27,948
30.	General Electric Co.	26,400
31.	Manufacturers Hanover	26,160
32.	The Capital Group	24,309
33.	First Interstate Bank Corp.	23,000
34.	First Chicago Corp.	20,803
35.	Marsh/McLennan/Putnam	19,357
36.	T. Rowe Price Associates	18,600
37.	Northern Trust Corp.	18,000
38.	Hartford Life Insurance Co.	17,742
39.	N.J. Division of Investment	17,500
40.	BankAmerica Corp.	17,227
41.	Franklin Resources Inc.	17,000
42.	New York State Teachers	16,861
43.	Northwestern Mutual Life	16,784
44.	E.F. Hutton Group	16,000
45.	Massachusetts Mutual Life	15,579
46.	Texas Teachers Retirement	15,400
47.	American General Corp.	15,300
48.	Bankers Life	15,149
49.	Pacific Mutual Life	15,093
50.	Chemical New York Corp.	15,013
51.	Van Kampen, Merrit	14,706
52.	State St. Bank and Trust	14,454
53.	CNA Financial	14,169
54.	Wisconsin Investment Board	14,088
55.	Wilmington Trust Co.	14,000
56.	Lincoln National Corp.	13,550
57.	JMB Realty Corp.	13,400
58.	Harris Bankcorp Inc.	12,900
59.	MONY	12,806
60.	PMC Financial Corp.	12,610
61.	Delaware Mgmt. Co.	12,409
62.	Fidelcor	12,000
63.	Ohio Public Employees	12,000
64.	Batterymarch Financial Mgmt.	11,905
65.	Michigan State Employees	11,882
66.	The Criterion Group	11,500
67.	Fiduciary Trust of N.Y.	11,216
68.	U.S. Trust Co.	11,154
69.	Nationwide Mutual Insurance	11,115
70.	Ohio State Teachers	11,100
71.	Bank of New England Corp.	10,900
72.	Continental Ill. Corp.	10,839
73.	Stein Roe Farnham	10,800
74.	AmeriTrust	10,406
75.	First Bank Systems	10,400
76.	Mass. Financial Services	10,325
77.	Mitchell Hutchins Asset Mgmt.	10,301
78.	Liberty Mutual	10,000
79.	Oppenheimer Holdings Corp.	10,000
80.	Washington Investment Board	9,900
81.	Brown Brothers Harriman	9,847
82.	Minn. Board of Investments	9,800
83.	Neuberger & Berman	9,587
84.	Mutual Benefit Life	9,444
85.	N.C. Retirement System	9,359
86.	Bank of New York	9,200
87.	Trust Co. of the West	9,110
88.	Fayez Sarofim	9,061
89.	Boatmen's Bank Shares	9,000
90.	Endowment Mgmt./Research	9,000
91.	Continental Corp.	8,838
92.	Fischer Francis Trees & Watts	8,800
93.	Miller Anderson & Sherrerd	8,400
94.	Connecticut Mutual Life	8,355
95.	NBD Bancorp	8,190
96.	U.S. Steel & Carnegie	8,100
97.	INVESCO	8,000
98.	Rothschild Inc.	8,000
99.	Centerre Trust	7,984
100.	Transamerica	7,805

* estimate

Funds lag . . .

Continued from page 3

representing 60% of the mutual fund universe) was 8.13%, while the mean return on the pension plans was 6.69%. Treasury bills returned 7.5% during the period, Mr. Berkowitz said.

Worse, pension fund performance also trailed the market indexes in the full 16-year period. That's mainly because pension funds had two catastrophic years in 1973 and 1974, and subsequent marginal performance never won back the losses, he said.

"There is no question that this study proves that pension funds have underperformed," said David Walker, who is deputy assistant secretary at the Labor Department.

"But the study is inconclusive on the reasons for that."

The study also showed:

- ERISA had no "discernible" effect on investment performance.
- Between May 1975 (when commissions were deregulated) and 1983, actual commission charges on equity trades declined by two-thirds. But during the same period, equity portfolio turnover tripled for ERISA plans, endowment plans and public pension plans, while it doubled for mutual funds.
- Portfolio turnover in the aggregate among stocks and bonds had no consistent effect on total portfolio performance for the 16-year period, despite its cost.
- Switching among stocks, bonds and cash equivalents and attempting to time the market had a significantly deleterious effect on the fund performance.

Mr. Berkowitz said he believes timing or "portfolio reallocations" probably were responsible for the significant underperformance of pension funds during the period.

Unlike pension funds, mutual funds are much less able to depart from rigid investment policies when events put their strategies out of favor. This rigidity turns out to be an advantage, he said. The study clearly showed the tendency to switch investment strategies at critical points produced poor performance.

Specialty mutual funds significantly outperformed pension funds, but balanced mutual funds as a group did not, he said.

"Most mutual funds are not diversified investment portfolios, and it is those specialty funds which outperformed pension plans," said Mr. Walker.

"When you compare the risk-adjusted performance of pension plans to the balanced mutual funds, you find comparable rates of return," he said.

Mr. Berkowitz said he believes the underperformance results from higher trading and commission costs from high portfolio turnover.

Pension fund turnover tripled in the period, compared with only a doubling of mutual fund turnover, the study reported.

"These costs can be significant when you are talking about transaction costs and significant amounts of turnover," he said.

Commission costs typically approximated 0.18% of the principal value of the transaction, the survey found, while market impact typically averaged about 0.05%, putting total transaction costs at 0.23%, or about 0.46% for a round-trip, (both a buy and sell), he said.

"The quality of the security selection must be quite good to offset costs of this magnitude," he said.

To better judge the pension funds' performance, the researchers developed a measure they called the "reward-to-variability" index, intended to demonstrate a fund's ability to take advantage of a higher level of risk.

Mr. Berkowitz said the index answers the question, "Was the fund paid for the higher level of risk it assumed?"

The index is calculated by first subtracting the Treasury bill rate from the fund return then dividing the result by the standard deviation of return.

It shows pension funds performed worse on the risk-adjusted basis as well as on the absolute basis.

The higher the index number, the better the fund is rewarded for taking additional risk. Pension funds recorded a mean reward-to-variability ratio of 0.01% during the 16-year period, while the Standard & Poor's 500 stock index recorded 0.10%.

This means that for every unit of risk, pension funds produced one basis point of return in excess of the risk-free rate, while the S&P realized 10 basis points, and the Salomon Brothers High Grade bond index produced minus seven basis points.

Mr. Walker said the Labor Department does not plan to act on the study until the follow-up is completed.

"Pending that result, we will have to see whether it is necessary or even appropriate to do anything," he said. ■

GTE may join . . .

Continued from page 3

organizations. Approval of the rule change, warns Mr. Lanoff, might invite "open warfare" between management and shareholders.

If the SEC does endorse the rule, the council will take its case directly to Congress, added Mel Rubin, a trustee of the $1 billion Retail Clerks Union and Food Employers Joint Pension Fund for Southern California, Bakersfield, and a council member.

However, new joiners expressed more interest in obtaining information on proxy votes than in waging a war on the one-share, one-vote issue.

"Proxy voting is where the council is most important to us," said David Seidel, vice president-pension fund management at the Stamford, Conn.-based GTE fund. The council is "way ahead of the corporate funds in dealing with the problem."

Echoed Die K. Hall, executive director of the $1 billion Arkansas Public Employees' Retirement System, Little Rock, the group is "hopefully a way for us to get information as it helps us in trying to vote our proxies."

There is both greater efficiency and more clout in trying to obtain information through the group, said Mr. Hall, whose fund recently joined the council. "Some of the larger corporations have tended to be close-mouthed in the past."

The council achieved a rapid buildup and widespread publicity in the first half of 1985 as it attacked "greenmail" practices and intervened in Phillips Petroleum Co.'s proposed recapitalization plan. Since the fall of 1985, however, the group noticeably had quieted down.

But observers said time has proved the council to be a credible entity, untainted by the fact that two of its three co-chairmen — New York City Comptroller Harrison J. Goldin and California Treasurer Jesse Unruh — are politicians. Membership is picking up steam with "the realization that the council is non-political," said James Koltes, a member of the investment committee of the $86 million Navy Relief Fund, a Washington-based endowment fund that is seeking council membership.

What's more, many pension funds have bided their time to see how well the council works, said Paul Quirk, executive director of the Massachusetts Pension Reserves Investment Management Board, Boston, which oversees $1.5 billion in public pension assets.

Another action that has buoyed the council's status was the invitation last fall by SEC Chairman John S.R. Shad to meet with the commission annually on issues of mutual concern.

"I think that their voice is a very important one and it's worth taking (their views) very seriously," Mr. Shad said in a telephone interview. He noted the council has established itself as a factor on the unequal voting rights issue.

Some council members are looking for the group to better focus its objectives at a late September meeting to be held in Kansas City, Mo. There, the council might target one or more situations where members would wage a proxy fight or seek election of its candidates to a corporate board, said Steven Matthews, special assistant comptroller for the New York City pension funds.

The New York City funds, with more than $25 billion in assets, are at the forefront of such issues. Last week, Mr. Goldin fought a proposal by Greenwich, Conn.-based Clabir Corp. to create unequal voting rights for different classes of common stock. The dual class proposal, however, was approved 98% by shareholders.

"Maybe it's time to do more than just vote together," said Mr. Quirk, explaining council members could meet with corporations whose anti-takeover actions they question.

In addition, some hope to expand the council's agenda. While some members have raised such sticky issues as executive compensation, others now are concentrating on how they can help companies do a better job and give a better return to shareholders. ■

Mapco fund . . .

Continued from page 3

bad, he is sucking wind and it's time to go away," said Mr. Troup.

If at any point during the five-year period a manager's probability of reaching the goal falls below 25%, then the manager's status will be re-examined.

"Based on the needs of our plan, the funding status for the plan, we needed something to give us a little more aggressive performance than a GIC relative to the real rate of return," Mr. Hyer said.

Both Hahn Holland, which uses a market-timing approach to equity investments, and Beutel Goodman, a value equity manager, are expected to achieve a 6% annual inflation-adjusted rate of return.

"Philosophically, we believe that we would like to have more than just two (equity) managers for $70 million," said Mr. Troup, "but in this particular instance, as the candidates fleshed themselves out, the other contenders did not seem to offer any diversification value."

Fiduciary Trust is expected to return 3% annually in real terms, while Aetna's real estate fund is targeted to achieve a real 4.5% annual return.

The Aetna GIC is expected to maintain a real return of 2.5%. ■

Terminations slow . . .

Continued from page 3

porate purposes, he added.

The spinoff/termination of Exxon Corp., New York, also is included on the most recent list from the PBGC.

The spun off plan, covering retirees, has assets of $1.8 billion with surplus assets of $1.6 billion.

An Exxon subsidiary, Exxon Coal USA, Houston, also has filed to terminate a $47 million plan, with surplus assets of $24 million.

Earlier in the year, Exxon Enterprises, New York, filed to terminate a $21 million plan, with surplus assets of $17 million.

All three terminations are pending with the PBGC.

Other termination filings are:

- N L Industries Inc., New York, a $300 million plan, with surplus assets of $150 million.
- Baker International Corp., Orange, Calif., a $173.3 million plan with a $56.3 million surplus.

"The decline in interest rates has caused the liabilities of pension plans to increase significantly," said Frank B. McArdle, education director of the Employee Benefit Research Institute, Washington.

He said the decline in interest rates has wiped out the pension system's $200 billion to $300 billion in surplus assets (*P&I Age*, July 7).

In addition, Kathleen P. Utgoff, executive director of the PBGC, said the Single-Employer Pension Plan Amendments Act may have played a short-term role. SEPPAA calls for a moratorium period on reversions and requires a 60-day notice to employees prior to the date of termination.

Mr. McArdle also said the proposed 10% excise tax could have caused companies to delay, or abandon, termination filings. ■

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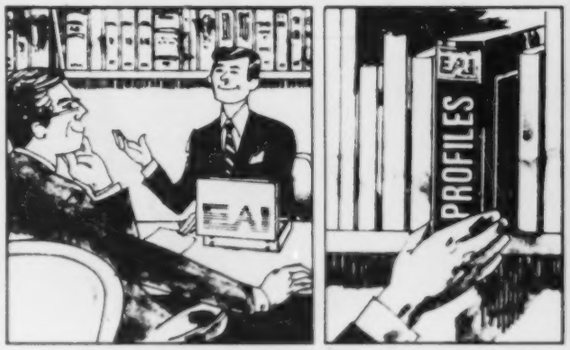

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C2710-2

No economic surprises predicted

By Chuck Paustian
and Trudy Ring

Corporate executives will be surprised if their pension funds get a boost from the economy in the remainder of 1986, as they predict generally flat or declining interest rates and a less-than-booming stock market.

"I do not see interest rates climbing back up dramatically — they are fluctuating at a low level," said Irene Leary, manager-employee benefit fund investments for Texas Instruments Inc., Dallas.

"With corporate earnings not doing very well and the economy not taking off, rates will tend to go a little lower," said G. Jake Miller, trust investment manager for Upjohn Co., Kalamazoo, Mich. Rates could go between 100 and 200 basis points lower by the end of the year, he said.

David Norris, director of retirement funds at Boise Cascade Corp., Boise, Idaho, said he looks for rates to drop by a smaller amount, between 60 and 80 basis points.

Rates may start back up again in 1987, but they likely will continue to trend down until then, said Don Bird, corporate director of employee benefits at E-Systems Inc., Dallas. Like the others, he attributed the downward trend to

Continued on page 63

Pensions & Investment Age

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The newspaper of corporate and institutional investing • $4.00 an issue • $75 a year • August 18, 1986

Alternative investments net $1.6 billion

Venture cap partnerships get 7 commitments

By Trudy Ring

At least seven tax-exempt funds have made commitments to venture capital limited partnerships recently.

• Bridge Capital Investors II, New York, has drawn commitments from five tax-exempt funds. The partnership had an initial closing April 2 with $74 million and a second closing with an additional $10 million June 30. The partners aim to bring the fund to $100 million by the end of September.

• Capital Research Management Group Ltd., Lawrence, Kan., has raised $1.5 million from individuals and corporations. Of that total, $1.2 million was in financing made available to the individuals and corporations by the Kansas Public Employees' Retirement System, Topeka.

• Three venture capital groups received commitments from the Pennsylvania State Employees' Retirement System, Harrisburg.

Bridge Capital's tax-exempt investors include the Exxon Corp. pension fund, New York; the Illinois Tool Works Inc. pension fund, Chicago; the Ford Foundation, New York; the New York State Common Retirement Fund, Albany; and the Wisconsin State Board of Investment, Madison.

The $5.5 billion Exxon fund committed $2 million to the Bridge Capital partnership, said C.W. Williams, assistant treasurer. Exxon also participated in Bridge Capital's first fund, he said. The Exxon fund has less than 2% of its assets in venture capital.

A pension official at Illinois Tool confirmed his fund made a commitment to Bridge Capital, but declined to comment further.

Continued on page 63

4 new funds join buy-out pool

By Marci Baker

NEW YORK — At least four new pension funds have signed up for Forstmann Little & Co.'s latest $1.5 billion-plus leveraged buy-out pools.

The latest pools will provide subordinated debt and equity financing for the management buy-outs it arranges.

Although the bulk of commitments have come from institutions that have participated in earlier Forstmann Little pools, sources said in excess of $100 million was drawn from first-time commitments to Forstmann by: the District of Columbia Retirement Board, Washington; the Massachusetts Pension Reserves Investment Trust, Boston; Eastman Kodak Co., Rochester, N.Y.; and American Express Co., New York.

General partner Theodore Forstmann could not be reached for comment. However, Forstmann Little reportedly has received in excess of $1 billion in commitments for its third subordinated debt fund — the Forstmann Little & Co. Subordinated Debt and Equity Partnership-III

Continued on page 63

Inside:

CORPORATE FINANCE: U.S. issuers are turning to the overseas market to set up global medium-term note programs. Plans are to get these new facilities going by year's end — page 43.

REAL ESTATE: The Mission Valley shopping center in San Diego, Calif., shown above, is the latest purchase by [illegible] — page 27.

[illegible] corporations source for term capital obligations — page 37.

Union told to pay for stock advice

IAM loses bid against Eastern

By Rose Darby

WILMINGTON, Del. — The International Association of Machinists Stock Ownership Trust has suffered a blow in its fight to get a better price for its Eastern Air Lines Inc. stock.

A U.S. District Court judge in Wilmington has denied a union request to require Eastern to pay for the trust's independent legal and financial advice on whether Texas International Airline's proposed acquisition of Eastern deals fairly with shareholders.

The IAM trust holds 3,413,237 shares of Eastern common stock, which represents 4.76% of the issued and outstanding common stock. The fund also holds 853,380 shares of 20% preferred stock, which represents 29.77% of the issued and outstanding preferred stock.

Each share of preferred stock is convertible into one share of common stock and is subject to automatic conversion under certain circumstances.

If all the preferred stock held by the IAM trust were converted into common shares, the IAM trust would own 4,266,617 shares of Eastern common stock, or 5.88% common stock.

Under the terms of Houston-based Texas Air's tender offer, the IAM trust's shares would be valued around $45 million. But the shares' valuation could be as high as $150 million, depending in part on how the special preferred stock is valued, the IAM complaint filed against Miami-based Eastern contends.

A higher valuation of the shares presumably would affect valuation of shares held in three other Eastern employee trusts: the Airline Pilot's Association trust fund; the Transport Workers Union trust fund; and the Eastern non-union employees' trust.

In total, a victory could drive up the final cost of acquiring Eastern to $990 million from the current $640 million purchase offer and might prompt Texas Air to reconsider the takeover, which Eastern's unions oppose.

The court decision leaves the plan trustees with determining whether they should continue to hire outside legal and financial advice, and how to pay for it if they decide to go ahead.

Eastern, in mid-June, filed with the Securities and Exchange Commission to offer the trust's preferred stock holders cash for their special 20% participating non-cumulative preferred shares or an exchange of Texas Air debentures in place of the shares.

If Eastern gets SEC approval of this offer, two-thirds of the trust's preferred shareholders and 51% of the

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* July indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	−5.6	14.08	28.42
Russell 3000[1]	−5.9	14.2	27.9
Ryan Index[2]	.61	13.83	27.01
Shearson Lehman Gov't./Corp.[2]	.65	10.66	21.81

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

SBA loans draw pension assets

Small-business arena attracting small-fund interest

By Barry B. Burr

A number of pension sponsors are putting large shares of their assets into Small Business Administration loans.

Among the sponsors that confirmed recent investments:

- Tanner Cos., Phoenix, Ariz., invested $3.5 million of its $10 million in defined contribution assets.
- Godfrey Co., Waukesha, Wis., assigned $750,000 of its $5 million profit-sharing trust.
- Wausau Medical Center, Wausau, Wis., allocated $1.5 million to $2 million of its $10 million profit-sharing fund.
- Shamrock Foods Co., Phoenix, Ariz., made an investment from its reported $6 million profit-sharing fund. The amount, unconfirmed, was said to be $4.5 million.
- West Allis Memorial Hospital, West Allis, Wis., placed $2.2 million of its $5.9 million retirement fund.
- Regional Transportation District of Denver committed $18 million to $20 million of its $100 million defined benefit fund.

Dana Investment Advisors Inc., Brookfield, Wis., which handles the SBA loan investments for the funds, is one of a few money managers running such portfolios for pension funds.

Pacific Mutual Life Insurance Co., Newport Beach, Calif., also invests in the SBA loans for pension funds.

"We wanted the SBA loans to provide a stable base so we could focus on active management on the equity side," said Don Gilmore, Tanner treasurer.

SBA loans are originated by financial institutions, generally banks. Michael L. Dana, president of Dana Investment, said his firm buys only the government-guaranteed part of the loans, the portion sold by banks and other financial institutions for liquidity.

The SBA insures 90% of loans of $155,000 or less and 85% of loans more than $155,000. The maximum SBA loan is $500,000.

Dana's share often amounts to less than the 85% or 90% share of the loan, as banks often retain a piece of the guaranteed portion, along with the non-guaranteed part, Mr. Dana said.

He said Dana buys the loans directly from banks or from SBA broker/dealers.

In all, there are about 25 SBA loan broker/dealers. Among the biggest are: Westcap Corp., Houston, a unit of Western National Life Insurance Co., Austin, Texas; Union Planters National Bank, Memphis, Tenn.; and Governmer Securities Corp., Houston.

New York-based Colson Secur ties Corp., a unit of National Ban of Washington, acts as transfe agent for interest and principa payments on all SBA loans. takes one-eighth of 1% of eac payment for its services.

The SBA loans act like Goverr ment National Mortgage Associa tion securities rather than bond The interest and principal paid b borrowers are passed by the ban to Colson, which in turn passe the payments on to investors.

The loans come in two forms - variable (priced off the prime rat and fixed rate.

Investors and managers conten the yield is higher than for compa rable maturing Treasuries.

As an example, Michael Kan Westcap senior vice presiden said a pool of 12 variable-rat loans, maturing in 17 years, wa priced at the prime rate plus ⅞% and selling at 108½%.

He said the yield amounted t 165 basis points over three-mont T-bills.

Mr. Dana said his firm has bee investing in the loans on behalf o employee benefits funds for abou six years. Dana buys only individ ual loans, from which it forms it

Continued on page 6

Indian confederation adopts 401(k) option

By Andrea Finamore

PORTLAND, Ore. — Investment trends may well be a topic at next summer's meeting of members of the Confederated Tribes of the Umatilla Indian Reservation who have joined the confederation's new 401(k) retirement plan.

The Umatilla, Walla Walla and the Yuse tribes have signed up for a 401(k) salary reduction retirement plan through American Trust Co., Honolulu, a $1 billion pension asset management firm.

The transaction, implemented July 11, is believed to be the first time American Indians are using a 401(k), said Paul Seaman, vice president of corporate communications of American Financial Services of Hawaii Inc., Honolulu, the parent company of American Trust.

With a 401(k) plan, members can decide annually how much they want to have deducted from pay and deposited in a tax-free investment fund that will grow until retirement.

The new plan for the confederation includes a profit-sharing option, and provides an Oppenheimer Equity Income and Special Fund, and a money market account with Far West Federal Bank, Portland, said Stephen R. Mazda, American Trust's mainland marketing director and 401(k) specialist.

American Trust will provide custodial administration for the plan.

Umatilla management is matching employee contributions dollar-for-dollar up to 5%. "Participants can defer 2% to 15% of their pay with the introduction of the 401(k)," said Mr. Mazda.

"Twice a year they can decide to increase or decrease contributions for the following year," he added. Between 58% and 68% of the tribal employees are now enrolled.

The tribes' ultramodern grain elevator, timber resources and commercial hunting, fishing and camping facilities generate most of the confederation's revenue, said Larry Delplanche, controller of the reservation.

"Retirement used to be a problem for Indians, since an Indian would work for his tribe, not for the government, and would receive only modest social security," said Mr. Delplanche.

"Historically tribes do not pay high salaries, so come retirement, an Indian's lifestyle would go down. Now, with this plan, instead of getting just a pat on the back and a 'thank you,' he can maintain his lifestyle as it was while he was receiving a pay check."

Melsue Minthorn, accounting clerk for the confederation and designated 401(k) tribal administrator, said the plan suits everyone.

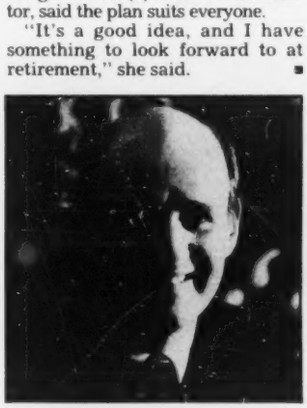
"It's a good idea, and I have something to look forward to at retirement," she said. ■

NYC returns spur dispute

By Brad Rudin

NEW YORK — Charges of mismanagement and political interference have embroiled New York City's pension system in a dispute that pits the finance commissioner, a recent mayoral appointee, against the comptroller, an elected official who often finds himself at odds with Mayor Edward I. Koch.

Poor performance by the city's equity managers and a mistaken decision to invest heavily in cash translates into a $1 billion loss of potential investment earnings for the city, Finance Commissioner Abraham Biderman wrote in a July 31 letter to the retirement system's trustees.



Comptroller Harrison Goldin

If the active equity managers had achieved returns equal to the Standard & Poor's 500 stock index, the city pension funds would have gained an additional $475 million during the five-year

Continued on page 65

PRIT hires 3 for international

By Rose Darby

BOSTON — Officials at the Massachusetts Pension Reserves Investment Trust completed the fund's international manager search by hiring three non-U.S. equity managers to invest a total of $90 million, according to Peg Harrington, analyst.

These three hirings bring to six the number of international equity managers for the $1.3 billion PRIT, she said. Combined, they will be investing about 10% of the fund in stock markets abroad, she added.

All managers will adhere to the board's South Africa-free strictures, she added.

State Street Bank and Trust Co., Boston, was hired to manage an international equity index fund, while Schroder Capital Management International Inc., New York, and Baring International Investment Ltd., Boston, will manage active non-U.S. equity portfolios, she said.

State Street received an initial allocation of $40 million for the index fund. Baring and Schroder were given about $25 million each, she added.

In June, the Pension Reserves Investment Management Board hired Warburg Investment Management International Ltd., London; Scudder, Stevens & Clark, New York; and N.M. Rothschild International Asset Management Ltd., London (*Pensions & Investment Age*, July 7).

At the time, $45 million was divided among the three.

Additional assets were now allocated to Scudder, N.M. Rothschild and Warburg, so each will manage a $25 million portfolio.

The shaping of a South Africa-free policy was a task that was hammered out in-house, according to Dan Kelly, director of program development.

A list of roughly 650 companies doing business in South Africa was compiled from several sources, he said.

"Our restrictions were very strict," said Mr. Kelly. The board is prohibited from owning any stock in a company doing business in or investing in South Africa, he said.

That includes any bank or finan cial institution that has loans out standing in South Africa, he added.

"In terms of exclusions, Ger many and the United Kingdor were clearly the most dramati cally affected markets," he said.

As of Dec. 31, there were 5 German securities in the Morga Stanley Europe Australia Far Eas index, he explained.

"Twenty of those German stock are eliminated under our list, c 38% of the EAFE weighting fo Germany," he said. Those 20 eli minated stocks comprise 10.2% c the total EAFE index, he added.

As of the same date, the Unite Kingdom had 112 securities in th EAFE, he said.

"Sixty-two are eliminate under our list or 55% of the EAF weighting for the U.K.," h explained. Those 112 issues repre sent 17.8% of the total EAF index, he said.

The United Kingdom had mor than 300 companies listed tha were restricted, many of which ar not part of the EAFE index.

Real estate questionnaires due

Real estate advisory firms seeking to be profiled in the Sept. 15 issue must return questionnaires as soon as possible to: Carol Wiley, directory coordinator, 740 Rush St., Chicago, Ill. 60611; (312) 649-5486. Responses were due Aug. 4.

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Baptists hire 6 for $500 million

By Marci Baker

DALLAS — The Annuity Board of the Southern Baptist Convention will allocate more than $500 million to six newly hired bond managers, wrapping up plans to rely more heavily on external management for its $2 billion fund.

The board selected Sanford C. Bernstein & Co. Inc., New York; MacKay-Shields Financial Corp., New York; Morgan Stanley Asset Management Inc., New York; Standish, Ayer & Wood Inc., Boston; ST'N Fixed Income Management, Santa Barbara, Calif.; and Western Asset Management Co., Los Angeles, to run fixed-income accounts, said Harold Richardson, senior vice president and treasurer.

The six new managers will run a total of $530 million in accounts of roughly equal size, with the money coming from internally run assets, said Mr. Richardson.

"This wraps up our plans for adding outside managers for a while," he said.

All of the external managers will run assets of the Southern Baptists' defined benefit and defined contribution plans. The defined benefit plan totals about $500 million and the defined contribution plan, $1.5 billion, Mr. Richardson said.

While the Southern Baptists have used outside money managers to run its 20% equity commitment, the 80% in fixed income historically has been run internally with heavy commitments to guaranteed investment contracts.

The rapid growth of its benefits assets led the Southern Baptists to seek what the board determined was the wiser course of diversified external management.

Fund assets have grown rapidly since Sept. 30, 1983, when the Southern Baptists had $1.6 billion in total assets, according to *Pensions & Investment Age*'s Top 1,000 pension fund rankings.

The Southern Baptist Convention launched its search for fixed-income managers early this year with the aid of consultant Callan Associates, San

Continued on page 64

Revenue plunge trickles down

Oil slump hits industry funds hard

By Rose Darby

Oil industry pension funds, and particularly those in the oil service industry, are beginning to feel the effects of the oil price drop of the past eight months.

Among the steps taken by the oil companies to cut costs and shore up earnings that affect the pension funds are:

- Terminations of overfunded plans that could result in the reversion of more than $1.5 billion in excess assets. Exxon Corp., Ashland Oil Corp. and Phillips Petroleum Co. are in the process of putting innovative spinoff/terminations into effect.
- Introductions of voluntary and involuntary severance programs and early retirement windows, which resulted in at least 18,600 employees being trimmed from the payrolls of oil companies so far. Some of the short-term costs of such programs are being borne by the pension funds, through the offering of higher benefits.
- Reductions in annual plan contributions to lighten the burden of pension expense.

Not all oil companies are affected to the same extent. Mesa Petroleum Co. and Shell Oil Co. are among those that diversified or sought to boost efficiency and cut costs during the past few years and now are experiencing better conditions than their struggling counterparts.

But many are having to take steps — some of them drastic — to cut costs in the employee benefits area.

"Categorically, there's no question about it, these companies are trying to lighten their load," said John Olson, first vice president of research for Drexel Burnham Lambert Inc., Houston. "It's now a matter of survival for some of these companies and they have to apply cost-cutting measures."

Fund termination is the approach some are taking to revert surplus assets into corporate coffers.

"On the pension plan side, in terms of retirement plan terminations, there's been a huge interest in them," said Phillip Merdinger, principal and actuary for William M. Mercer-Meidinger Inc., Dallas.

"In some instances, the driving force is to recapture surplus assets," he said. "In others,

companies are moving away from defined benefit plans and replacing them with some type of defined contribution plan."

There also are cases in which the defined benefit plan is not being replaced by anything, Mr. Merdinger added, although he would not name funds that had done this.

Indeed, in the past few months Exxon, Phillips Petroleum and Ashland Oil have announced terminations totaling between $1.6 billion and $1.7 billion.

In New York, Exxon expects to recoup more than $1 billion in surplus pension assets through a spinoff/termination of its $5.2 billion U.S. defined benefit plan.

Exxon will purchase a special type of annuity contract that will allow it to continue to manage the assets backing its liabilities for active and retired participants, *Pensions & Investment Age*, June 23).

"We're saying in the recapture that we have accrued a substantial surplus," said Allen Harrison, assistant treasurer. "And, we deserve to use it for corporate purposes."

The $1.5 billion Phillips Petroleum pension fund, Bartlesville, Okla., will recoup about $425 million before taxes in a spinoff/termination (*P&I Age*, June 23).

The same type of special annuity contracts will be purchased to cover the Phillips fund's liabilities, said fund officials.

At Ashland Oil, Ashland, Ky., the $522 million defined benefit plan hopes to recapture between $200 million and $300 million in a spinoff/termination. (*P&I Age*, June 9).

The company plans to use a floor offset pension program in place of its terminated plan.

The fund will give employees a sizable por-

Continued on page 64

Bank problems rise as prices drop

By Brad Rudin

The oil-related financial woes of Texas banks are spilling over to their trust departments as well.

Although bank trust executives report no exodus of either key personnel or clients, they do admit their problems increased as oil prices decreased. For example:

- Some clients question the safety of their assets in banks plagued by problem loans.
- New trust business often accompanies new loans, and lending activity in the oil patch is down sharply.
- Accounts are being lost as a result of terminations of overfunded pension plans, an occurrence not unique to Texas but becoming increasingly commonplace among Sun Belt companies, the same companies that most often give their pension business to Sun Belt banks.
- The size of some trust department staffs has been cut as part of bankwide efforts to reduce costs.
- Anticipating the uneasiness of some prospective and existing clients, some banks are incorporating into their trust marketing information on the separation of the trust and commercial sides and more details on how trust assets are invested.

"Let's just say (the oil price drop) hasn't been a positive . . . that's for sure," said Ted E. Davis, a senior vice president at the First City National Bank of Houston.

"From a new-business standpoint, it probably has hurt the regional banks in this part of the country in competition because not only do they have to get over the hurdles of selling somebody on how well you manage their money or how good a custodian you are, but now you have to allay their fears that their assets are not in jeopardy," said Jack R. Hamilton, regional manager at the Houston office of Citicorp Investment Management Inc.

The financial officer of a Texas company this month approached Citicorp to manage its corporate cash, Mr. Hamilton said.

He said the executive told him: "I don't want to deal with any of the small banks here with my corporate cash. I'd rather have it in some large institution where I know it's going to be there tomorrow."

Battered by the depressed Southwestern economy, Texas trust departments have lost ground to banks in other regions. InterFirst Corp., Dallas, for example, which ranked 20th in discretionary trust asset market value in 1984, slipped to 28th last year, according to a survey of the top 100 U.S. trust departments.

The survey, published last month in American Banker, showed First City Bancorporation of Texas Inc., Houston, tumbled to 64th place after ranking 45th in 1984.

Texas American Bancshares Inc., Fort Worth, and Republic-Bank, Dallas, also slipped.

Of the five Texas banks ranked in the survey, only MCorp, Dallas, moved up — to 49th place from 99th. But the 1984 statistics covered only MBank Dallas, the lead bank of MCorp, the survey noted in a footnote.

"Partially what you are seeing there is that energy firms in Texas and the Southwest are not doing as well, therefore th ir assets are not growing as well," said David J. Pittman, senior vice president

Continued on page 64

Investment banking fees high, but tolerated

By Brad Rudin
and Marci Baker

The high fees that hel[illegible] erate wealth for inves[illegible] bankers raise eyebrows a[illegible] corporate executives who regard them as a costly, but necessary, part of doing business.

Interviews with corporate executives show Wall Street's fees generate concern on Main Street. The concern, however, rarely reaches blanket condemnation.

Although the executives criticized underwriting fees, they expressed a stronger distaste for the costs of merger and acquisition work.

"We try to watch the fees as much as we can and I think for some transactions I'm sure the fees are OK," said Thomas F. Murasky, vice president and chief financial officer at K mart Corp., Troy, Mich.

"Now the ones I read about in the paper — which we haven't been privy to in terms of all these takeovers and leveraged buy-outs — the fees seem to be enormous. From the outside looking in, it seems like they are awfully high."

Mr. Murasky referred to newspaper accounts of fees earned as a result of Dart Group Corp.'s unsuccessful efforts to acquire Safeway Stores Inc.

Yet the fees may have been a worthwhile expense, Mr. Murasky said. "Safeway may think they got a good deal because they are surviving as a corporation."

Dart's bid for Safeway also brought comment from the treasurer of the San Francisco-based DiGiorgio Corp., Christine Timmerman: "I certainly am appalled when I read the amount of dollars that go in the mergers and acquisitions area."

She referred to reports of a $10 million fee to Morgan Stanley & Co., financial adviser to Kohlberg Kravis Roberts & Co., an investment firm that thwarted Dart's efforts to acquire Safeway. A $60 million fee was earned by KKR, which made a $69-a-share tender offer for Safeway.

An earlier report cited a $15 million fee to Dart's investment banker, Drexel Burnham Lambert Inc.

"The whole transaction was so expensive you wonder whether the shareholders and the company are coming out ahead or if Wall Street is," Ms. Timmerman said.

Ms. Timmerman lamented what she said was a decline in relationship-oriented investment banking.

Too many investment bankers today are only interested in single transactions, she said.

"We're looking for relationship investment banking the way it used to be when an investment banker worked on whatever deal

Continued on page 44

Corporate fees paid to most important investment bankers*

Company type	Total fees ($ thousands)	% paid to most important banker	% paid to second most important banker
Industrials	$2,812	65%	39%
Utilities	3,126	50	29
Bank holding cos.	2,069	56	35
Thrifts	1,925	67	29
All companies	**2,562**	**62**	**3[illegible]**

* Averages

Source: Greenwich Associates, Greenwich, Conn.

Opinion

Case's solution unreasonable

A U.S. COURT OF APPEALS decision upholding below-market-rate mortgages as prudent under the Employee Retirement Income Security Act opens the doors to abuses.

The decision may have been right in terms of law and right in this particular case, which involved mortgage loans made by Local 675 Operating Engineers Pension Trust, but those concerned about the long-term security of the private pension system cannot applaud it.

The court's decision substituted a subjective standard for an objective one. Instead of being required to achieve "market rates" of return on mortgage investments, pension funds now must only achieve "reasonable rates" of return.

The trouble with this standard is that one person's reasonable rate is another's giveaway, and it can take a court case to decide who is right.

It is relatively easy to determine what the market interest rate for mortgages is. It is much more difficult to determine what is a "reasonable" rate of return.

Is it the Treasury bill rate? Is it half of the local market rate for mortgages? Three-quarters of the local market rate?

Some pension executives will keep the long-term interests of their funds in mind and will make mortgages available at only modest discounts from market rates. They will do as much homework before making the loans as the executives of Local 675 did. Others will succumb to temptation to win popularity or try to stimulate employment by offering mortgage money at large discounts and without sufficient scrutiny of the borrowers.

The Department of Labor must be prepared to challenge below-market-rate investments to establish what qualifies as "reasonable." Because the objective standard has been ruled out by one court, other courts will have to determine the meaning of "reasonable."

And pension fund trustees making below-market-rate loans can never be sure, until the matter is settled in court, whether their loans will be regarded as prudent.

Funds start looking for real deals

PUBLIC EMPLOYEE AND TAFT-HARTLEY pension funds have been slow to invest in such areas as real estate and international. But by good luck or good management, they may be investing in real estate, at least, at a propitious moment.

According to money managers and consultants, what activity there is in real estate investing is coming from public pension funds and union funds. Corporate funds are holding back, some because they are near their asset allocation limits, others because of the surplus of office space in the country.

The public and union funds have taken longer to reach the decision to invest in real estate, but having made the decision they are going ahead despite the bad news about the real estate industry.

Perhaps they remember the old saws about successful investing: "Buy on bad news and sell on good;" and "buy low and sell high."

The news about real estate is bad in many cities, and real estate prices in those cities are low.

For those with patient money, such as pension funds, this sounds like a perfect time to buy real estate.

Perhaps the public and Taft-Hartley fund tortoise will pass the corporate fund hare as it sits on the sidelines.

Letters to the editor

Transaction costs

To the Editor: Concerning the article in the June 23 issue on the subject of transactions costs, we have a couple of thoughts that might be of interest.

The first observation is that there are two types of transactions costs. The first is measurable, while the second is not.

The measurable transactions cost is the combination of commissions and the movement in stock price both before and after a transaction is initiated. This form of transactions cost is very difficult to measure but can theoretically be measured.

Aside from the commission, it is a zero sum game. If a stock trades unchanged from the prior trade, then both the buyer and seller can claim a zero transactions cost (not including commissions). If the stock moves up (or down) upon execution of an order, then the seller (or buyer) can claim to have had favorable execution with a negative transactions cost. This measurable transactions cost is essentially a zero sum game, so the measurable total transactions cost will tend to be zero, plus the commission, when averaged across all trades.

Unfortunately, this measurable transactions cost is not the true transactions cost.

The true transactions cost consists of commissions plus any change in market price vis-a-vis the price that would have existed in the absence of the transaction order. This unmeasurable cost virtually always must be positive. The price of a stock in the absence of a block sell order would surely be no lower than the price that exists once the order has been executed.

Thus, while the observable transactions costs should average zero, the true (and unmeasurable) transactions costs generally must be a positive cost. It is this unmeasurable transactions cost that represents a drain on performance if turnover is excessive. However, if it cannot be measured, one cannot ascertain its impact on portfolio performance.

In short, money management organizations are faced with a dilemma.

They know that placing a transactions order will move the stock price (vis-a-vis the absence of that order). They know that this translates into an adverse effect on performance. However, what they cannot measure, they cannot readily control.

The result is that too much attention may be focused on the measurable transactions cost. This may lead to strategies for reducing the measurable transactions cost that do not necessarily translate into a reduction in the true transactions cost. This is a pervasive problem for money management and hence for the pension sponsor. We are embarrassed to say that, while we can throw this monkey wrench into the discussion of transactions costs, we cannot propose any superior alternative.

If something is theoretically unmeasurable, how do we deal with it? We don't know.

In any event, should the subject of transactions costs come up in the future, you may find these ruminations to be useful.

Robert D. Arnott
Roger G. Clarke
President and
Managing director,
TSA Capital Management
Los Angeles

GM responds

To the Editor: I am disappointed with the recent article by Sheryl Cohen on electronic payments by General Motors. I would like to make the following points:

- As Ms. Cohen did not interview people closely involved with GM, inaccurate statements were made regarding GM's plans to pay electronically.
- GM has never discussed its plan with Professor Ned Hill who is quoted in your article. According to Professor Hill, he was quoted out of context from an interview about his 1984 paper on the cash flow time line.
- Contrary to the tone of your article, GM is developing amicable relations with the National Automated Clearing House Association.

I am hopeful that your normally high professional standards will be applied in the future.

Benson K. Woo
Director
General Motors Corp.
New York

Editor's note: Officials of General Motors — including Mr. Woo — refused to cooperate with Pensions & Investment Age *in the researching of this story. GM officials also were given an opportunity to confirm or refute the details of the story, but refused.*

Workstation error

To the Editor: In your July 21 edition, our treasury workstation product was listed incorrectly as having been developed by Integrated Cash Management Systems.

LaSalle's CashPro Treasury System was developed by Integrated Cash Management Services Inc. of New York, better known as ICM. The system was customized by us to meet the demands of the market we serve.

A California firm, Wills-Van den Burgh, developed the Integrated Cash Management System.

Dennis Rees
Product manager
Cash Management Division
ABN/LaSalle
Chicago

Editor's note: The information was supplied incorrectly on the questionnaire submitted by ABN/LaSalle.

Chase index fund

To the Editor: In your article in the July 21 issue of *Pensions & Investment Age* where bond index funds were discussed, Chase Investors Management Corp. was listed as having no bond indexation accounts; in fact, $980 million are indexed to a variety of indexes.

H. Dean Benner
Managing director-fixed income,
Chase Investors Management
New York

Yamaichi omitted

To the Editor: Our name should have been included in the Directory of International Investment Advisers Aug. 4.

Your questionnaire did not reach us as it had somehow been mailed to a wrong address.

The correct address is: Yamaichi Capital Management Inc., 2 World Trade Center, Suite 9666, New York, N.Y. 10048; (212) 912-6484.

Continued on page 50

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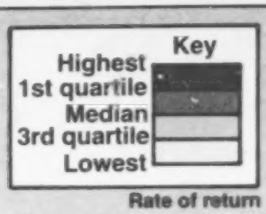
PIPER

The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. *PIPER details comparative performance data on equity and fixed-income funds at more than 200 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

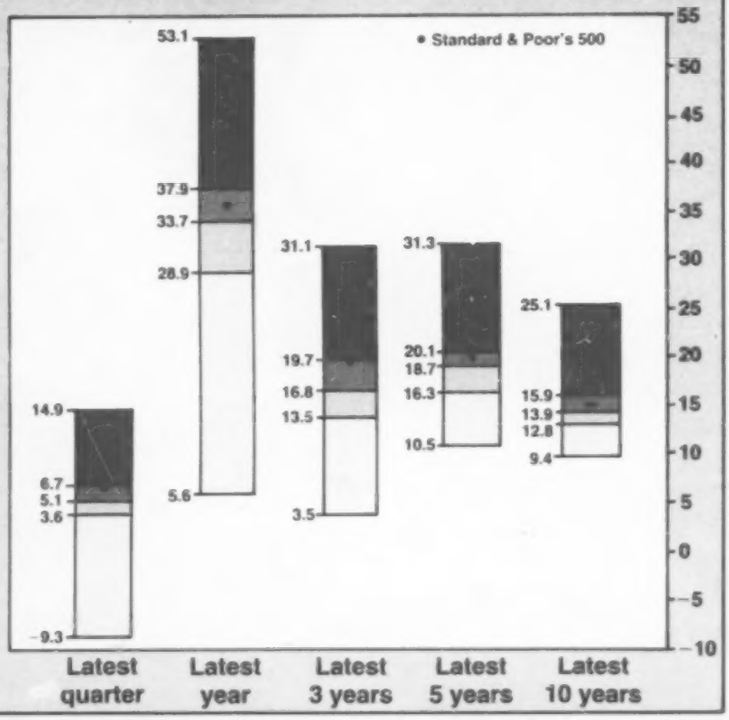
Pooled equity funds of banks and insurance companies.

All periods ending June 30,1986, and all figures, except latest quarter, are annualized total returns.

PIPER report compiled by Rogers, Casey & Barksdale Inc.



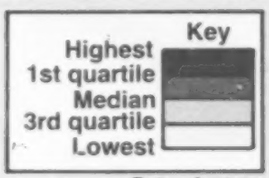
Rate of return



Pooled fixed-income funds of banks and insurance companies.

All periods ending June 30, 1986, and all figures, except latest quarter, are annualized total returns.

PIPER report compiled by Rogers, Casey & Barksdale Inc.



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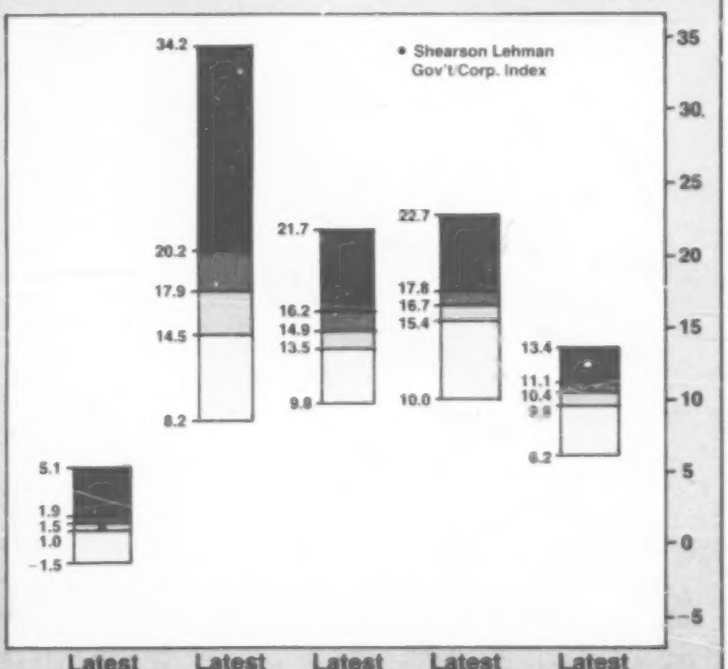

Large-cap strategy yields best results

By Trudy Ring

Investing in fairly large-capitalization companies with consistent growth produced the best results for bank and insurance company commingled funds in Pensions & Investments' Performance Evaluation Report for periods ended June 30.

While some funds had stellar performance, fewer than half managed to outperform the Standard & Poor's 500 stock index in any period of the survey. The median PIPER fund returned 5.1% in the second quarter of 1986, compared with 5.9% for the index. For the 12 months ended June 30, the median fund returned 33.7%, while the index returned 35.8%.

For the three years ended June 30, the median fund had a compound annual return of 16.8%, but the index had 19.3%. Annualized return figures for the latest five years were 18.7% for the median fund and 19.4% for the index, while for the 10-year period they were 13.9% for the median fund and 14.7% for the index.

One of the top performers in the PIPER survey was Sun Banks Inc., Orlando, Fla. Its equity fund had the best return in the three-year period, 31.1%, and the five-year span, 31.3%. It was third in the one-year period with 51.4%.

In the latest quarter and in the 10-year period, it was out of the top three but still in the top 10%. Its return for the second quarter was 8.7%, while its 10-year annualized figure was 19.1%.

About $155 million is invested in the fund, which concentrates on large-capitalization, well-known companies with above-average growth rates, said Anthony R. Gray, president of Sun Banks' investment management group.

The fund has large positions in financial services companies, especially property and casualty companies and regional banks, Mr. Gray said. Other industries it favors are consumer non-durables, drugs and technology.

Among the financial companies, some of the fund's biggest holdings are **Aetna Life & Casualty Co., Chubb Corp.** and **Toledo Trustcorp**. Favored consumer companies are **B.A.T. Industries PLC, Coca-Cola Co.** and **Ralston Purina Co.** Some drug companies it holds are **Bristol-Myers Co.** and **Merck & Co. Inc.**, while technology holdings include **Computer Associates International Inc., Digital Equipment Corp.** and **Tandem Computers Inc.**

Another top performer was First National Bank of Neenah, Wis., whose stock fund was first for the one-year period with a return of 53.1%. The fund also placed in the top 10% for the quarter, with 8.9%, and the three-year period, with 22.4%. In the longer periods, it was out of the top 10% but still above the median, with 19.4% for the five-year span and 16.2% for 10 years.

The fund, with assets of $6.5 million, is oriented toward growth stocks but not necessarily small-cap ones, said Ken Brusda, vice president and trust investment officer. About half the portfolio is in core, consistent growth stocks, one-fourth in emerging growth companies and the remainder in special situations, he said.

"What has helped the performance over the years is that this philosophy of consistent growth kept us out of the heavily cyclical areas that have been disappointing investors," Mr. Brusda said. The fund has avoided stocks in energy, capital goods and utility companies, he said, while 75% of its holdings are in consumer-oriented industrial and financial companies.

Some of the fund's core growth holdings are consumer companies such as **Philip Morris Inc., Capital Cities/ABC Inc.** and **Bristol-Myers Co.** In emerging growth companies, stocks include **Plenum Publishing Corp.**, the largest publisher and

Continued on page 20

Aggressive moves pay

Bond specialists head second-quarter list

By Rose Darby

Portfolio managers employing specialized, aggressive bond strategies coped best with the increasingly flat interest rate scenario of the second quarter and outpaced their counterparts in Pensions and Investments' Performance Evaluation Report.

A high-yield emerging company fund managed by Wellington Trust Co. of Boston was the top performer for the second quarter, with a 3.3% return.

This $20 million fund invests in the bonds of small companies with average quality ratings of B 1 or lower by Moody's Investors Service, New York, said Laurie A. Gabriel, vice president of investment administration.

In the fund, "we are getting the advantage of a much higher coupon than we would get for investment-grade securities," she said. Current yield on the emerging company fund as of June 30 averaged 12%, and the average yield to maturity averaged 11.5%, she added.

In comparison, the current yield on the Shearson Lehman Government/Corporate bond index averaged about 9%, as of June 30, and the yield to maturity averaged about 8.5%, she said.

"We think these securities do well relative to investment-grade fixed income in periods when the economic outlook for these types of companies is good or improving," Ms. Gabriel explained. "That was the case for most of the second quarter."

The roughly $37 million bond fund managed by United Capital Management, Denver, was the second fund for the quarter, with a total return of 3.2%.

First Variable Life, Little Rock, Ark., came in third for the quarter with a total return of 3.1%. Provident National Bank, Philadelphia, and The First National Bank of Shreveport, La., tied for fourth when their fixed-income funds each returned 2.9%.

The median fund had a total return of 1.5% for the three months ended June 30, and the Shearson Lehman index stood at 1.3% during that period.

Although United Capital Management came in second for the quarter, it had the champion fund for the one-, three- and five-year periods

Continued on page 21

Editor's note: The high return for the fixed-income fund for the second quarter shown in the chart at left, is wrong. The correct number for the high fund for the quarter should be 3.3%.

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Real estate funds 28

Top quartile commingled equity funds

3-month returns

	%
American Natl. Bank, Ind.	14.9
Summit Trust Co., N.J.	13.3
Citizens Chillicothe (B), Mo.	11.8
Bank of Delaware	11.6
Alaska Pacific Trust	10.8
First Interstate of Denver	10.6
Pittsburgh National (GRP QMS)	10.3
Bank of Oklahoma, Tulsa	10.3
Pittsburgh Natl. (COMB QMS)	10.1
First Trust Corp., Colo.	9.9
Barnett Banks Trust Co., Fla.	9.8
Indiana National Bank	9.8
First Wis. Natl., Madison	9.7
First of Toledo, Ohio	9.6
Security Pacific (E), Calif.	9.5
Hawaiian Trust	9.3
Pioneer Bank, Ill.	9.3
Associated Kellogg, Wis.	9.2
Commerce Bank, St. Louis	9.2
Sentry Life (B), Wis.	9.2
State Natl., Evanston, Ill.	9.1
California First Bank	9.0
Key Trust Co., N.Y.	9.0
South Carolina National	9.0
First of Neenah, Wis.	8.9
Unibanctrust, Ill.	8.9
Sun Bank, Fla.	8.7
Northern Central, Pa.	8.7
First Jersey Natl., N.J.	8.6
Bank of Tokyo, N.Y.	8.4
Omaha Natl. Bank, Neb.	8.3
First Fidelity Bank, N.J.	8.3
Toledo Trust, Ohio	8.3
Citicorp, N.Y.	8.2
Manufacturers Detroit	8.2
First in Bartlesville, Okla.	8.2
First of Neenah, Wis.	8.1
Long Island Trust, N.Y.	8.1
Associated Manitowoc, Wis.	8.0
Bank of Virginia	8.0
First Kentucky Trust	7.9
Lloyds Bank (D), Calif.	7.9
First Interstate Billings, Mont.	7.6
Union Trust Baltimore (D)	7.6
Morgan Guaranty, N.Y.	7.6
Fifth Third Bank, Ohio	7.4
Guardian Insurance (No. 1), N.Y.	7.4
Northern Trust (Div.), Ill.	7.3
Mellon Bank, Pa.	7.3
Great West Life, Manitoba	7.2
First Natl. of Tulsa	7.2
Hamilton Bank, Pa.	7.2
Allied Bank, Texas	7.2
Natl. Bank of Commerce, Neb.	7.1
Dominion Trust, Va.	7.1
Third Natl., Nashville	7.1
New York Life Ins. (1)	7.1
Lake Shore Natl., Ill.	7.1
NCNB National Bank, N.C.	7.0
Chemical Bank (1), N.Y.	7.0
First of Oklahoma	7.0
Seafirst Bank, Wash.	6.9
Northern Trust (Conc.), Ill.	6.8
Boston Safe Deposit	6.8
Citizens Fidelity (E), Ky.	6.8
MTrust, Texas	6.7
Society National, Ohio	6.7
Natwest USA, N.Y.	6.7
Riggs of Washington	6.7
Penn Mutual Life (A), Pa.	6.7
Merchants National (2), Ind.	6.7
Lincoln Natl. Pens., Ind.	6.7
Provident Bank, Ohio	6.7
Standard & Poor's 500	**5.9**

The directory of real estate advisers will appear Sept. 15.

1-year returns

	%
First of Neenah, Wis.	53.1
American Natl. Bank, Ind.	52.2
Sun Bank, Fla.	51.4
First Trust Corp., Colo.	51.1
Northern Central, Pa.	50.8
Pioneer Bank, Ill.	50.7
Pittsburgh Natl. (COMB QMS)	50.6
Pittsburgh Natl. (GRP QMS)	48.7
Omaha Natl. Bank, Neb.	48.6
New York Life Ins. (1)	48.6
First Interstate of Denver	48.6
Puget Sound Natl., Wash.	48.6
Bank of Virginia	47.9
Summit Trust Co., N.J.	47.1
First of Neenah, Wis.	47.0
South Carolina National	46.5
Mutual of America (2), N.Y.	46.1
First of Toledo, Ohio	44.9
Guardian Insurance (1), N.Y.	44.6
Alaska Pacific Trust	44.0
State Natl., Evanston, Ill.	44.0
Bank of Delaware	43.6
Barnett Banks Trust Co., Fla.	43.5
Nationwide Life Ins., Ohio	43.3
Commerce Bank, St. Louis	43.3
Citizens Chillicothe (B), Mo.	43.2
Philadelphia National	42.9
First of America, Mich.	42.9
First Bank, Milwaukee	42.8
Security Pacific (E), Calif.	42.3
Seattle Trust, Wash.	42.2
First Fidelity Bank, N.J.	41.8
Associated Kellogg, Wis.	41.4
American Natl. Bank, Ind.	41.1
Manufacturers Detroit	41.1
Bankers Life, Iowa	41.0
New Jersey National	40.8
Republic Natl., Dallas	40.4
Associated Manitowoc, Wis.	40.4
Indiana National Bank	40.2
First of Oklahoma	40.2
American Natl., Chicago	39.9
Mellon Bank, Pa.	39.7
Employers Life of Wausau (1)	39.7
Continental Bancorp, Pa.	39.7
CREF	39.7
First Security Natl. (D), Ky.	39.6
Riggs of Washington	39.4
Natl. City, Cleveland	39.3
Chemical Bank (2), N.Y.	39.2
Manufacturers Hanover, N.Y.	39.1
Bank of New York	39.0
First Jersey Natl.	38.9
Merchants Natl. (I), Ind.	38.7
Pacific Mutual, Calif.	38.7
Key Trust Co., N.Y.	38.6
First Kentucky Trust	38.6
California First Bank	38.5
Natwest USA, N.Y.	38.3
Allied Bank, Texas	38.3
Norwest Bank, Minn.	38.3
Hawaiian Trust	38.3
Merchants National (2), Ind.	38.3
Texas Commerce	38.2
Old Second National, Ill.	38.2
Mutual Benefit, N.J.	38.2
Harris Trust, Ill.	38.0
Liberty National, Okla.	37.9
Standard & Poor's 500	**35.8**

3-year returns

	%
Sun Bank, Fla.	31.1
Northern States Trust Co., Ill.	27.9
Bank of the West, Calif.	26.3
First of America, Mich.	25.6
Manufacturers Detroit	25.5
Bank of New England, Mass.	25.1
New Jersey National	25.1
Nationwide Life Ins., Ohio	24.8
MTrust, Fort Worth, Texas	24.7
Alaska Pacific Trust	24.4
First Interstate of Oregon	24.3
State Natl., Evanston, Ill.	24.2
Guardian Insurance (1), N.Y.	24.2
Mellon Bank, Pa.	24.0
First Trust Corp., Colo.	23.8
LaSalle National, Ill.	23.0
Republic Natl., Dallas	22.9
Bank of Virginia	22.8
First Union Bank, N.C.	22.4
First of Neenah, Wis.	22.4
Barnett Banks Trust Co., Fla.	22.2
New York Life Ins. (1)	22.2
First of Neenah, Wis.	22.2
Prudential, N.J.	22.0
First Jersey Natl., N.J.	22.0
Pittsburgh Natl. (COMB QMS)	22.0
Frost National (A), Texas	21.9
Citytrust (E1), Conn.	21.7
Pittsburgh Natl. (GRP QMS)	21.5
Provident National, Pa.	21.4
Dominion Trust, Va.	21.3
American Natl. Bank, Ind.	21.3
Continental Bancorp, Pa.	21.1
US Trust, N.Y.	21.1
Riggs of Washington	20.9
Cullen Bank, Texas	20.9
Lake Shore Natl., Ill.	20.7
First of Omaha (D), Neb.	20.7
Citizens Fidelity (E), Ky.	20.6
Old Kent, Mich.	20.6
Dauphin Deposit, Pa.	20.6
Bank of Tokyo, N.Y.	20.5
Merchants Natl. (2), Ind.	20.4
First Security Natl. (D), Ky.	20.3
Mercantile Trust, Mo.	20.3
Pioneer Bank, Ill.	20.3
US Natl. of Galveston, Texas	20.2
First in Bartlesville, Okla.	20.1
Mutual of New York	20.1
American National, Chicago	20.0
AmeriTrust, Ohio	20.0
CREF	20.0
Sentry Life (B), Wis.	20.0
Natwest USA, N.Y.	19.9
Massachusetts Mutual	19.9
American Natl. Bank, Ind.	19.8
Colorado National Bank	19.8
John Hancock (1K), Mass.	19.7
Summit Trust Co., N.J.	19.7
Valley Fidelity, Tenn.	19.7
Natl. Bank of Commerce, Tenn.	19.7
John Hancock (1L), Mass.	19.7
Great West Life, Manitoba	19.7
Standard & Poor's 500	**19.3**

We get straight A's.

Crown Life's financial performance has earned us straight A's from some of the country's most prestigious independent rating institutions. These ratings confirm what our clients have always known – Crown Life is a first class company.

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Equity Managers

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Managing Directors *(203) 254-6800*

Ten Sasco Hill Road, Fairfield, Connecticut 06430

5-year returns

	%
Sun Bank, Fla.	31.3
Manufacturers Life, Ontario	26.5
Guardian Insurance (1), N.Y.	25.7
First Union Bank, N.C.	25.5
Manufacturers Detroit	25.0
Pioneer Bank, Ill.	24.4
Nationwide Life Ins., Ohio	24.0
First of Oklahoma	23.6
Lake Shore Natl., Ill.	23.4
Dauphin Deposit, Pa.	23.3
Bank of Virginia	23.2
Mutual Benefit, N.J.	23.0
New Jersey National	23.0
First Interstate of Oregon	23.0
First of America, Mich.	22.9
Connecticut Mutual Life	22.8
New England Mutual, Mass.	22.6
MTrust, Fort Worth, Texas	22.4
Barnett Banks Trust Co., Fla.	22.4
Resource Bank & Trust, Minn.	22.0
First Security Natl. (D), Ky.	22.0
American Natl., Chicago	22.0
Pittsburgh Natl. (COMB QMS)	21.9
Merchants Natl. (2), Ind.	21.9
First Trust Corp., Colo.	21.7
First Bank Milwaukee	21.7

Top equity funds by size

1-year returns

Over $100 million

	%
Sun Bank, Fla.	51.4
Philadelphia National	42.9
Manufacturers Detroit	41.1
Republic Natl., Dallas	40.4
American Natl., Chicago	39.9
Mellon Bank, Pa.	39.7
CREF	39.7
Natl. City, Cleveland	39.3
Manufacturers Hanover, N.Y.	39.1
Norwest Bank, Minn.	38.3

$50 million to $100 million

	%
New York Life Ins. (1), N.Y.	48.6
First Interstate of Denver	48.6
Continental Bancorp, Pa.	39.7
Bank of New York	39.0
First Jersey Natl. N.J.	38.9
Pacific Mutual, Calif.	38.7
Liberty Natl., Okla.	37.9
Natl. Bank of Commerce	37.8
First of America, Mich.	37.4
Society National, Ohio	37.1

$10 million to $50 million

	%
First Trust Corp., Colo.	51.1
Northern Central, Pa.	50.8
Pittsburgh Natl. (Grp Qms)	48.7
Omaha Natl. Bank, Neb.	48.6
Bank of Virginia	47.9
Summit Trust Co., N.J.	47.1
First of Neenah, Wis.	47.0
South Carolina Natl.	46.5
Mutual of America (2), N.Y.	46.1
First of Toledo	44.9

Under $10 million

	%
First of Neenah, Wis.	53.1
American Natl., Ind.	52.2
Pioneer Bank, Ill.	50.7
Pittsburgh Natl. (Comb Qms)	50.6
Puget Sound Natl., Wash.	48.6
Alaska Pacific Trust	44.0
American Natl. Bank, Ind.	41.1
Bankers Life, Iowa	41.0
Old Second Natl., Ill.	38.2
First United Trust (G), Ill.	36.8

10-year returns

Over $100 million

	%
First Wis. Natl., Madison	21.5
American Natl., Chicago	20.8
Sun Bank, Fla.	19.1
US Natl. of Oregon	18.6
First Union Bank, N.C.	18.4
Provident Natl., Pa.	18.4
Bessemer Trust, N.Y.	18.3
Manufacturers Detroit	18.1
MTrust, Texas	17.9
Equitable Life (4), N.Y.	17.4

$50 million to $100 million

	%
Manufacturers Life, Ont.	25.1
First Interstate of Denver	19.2
Natl. Bank of Commerce	18.4
New England Mutual	17.9
Continental Bancorp, Pa.	17.7
First of America, Mich.	17.5
First Jersey Natl., N.J.	17.1
Fifth Third Bank, Ohio	16.8
First Interstate of Oregon	16.3
AmSouth, Ala.	16.3

$10 million to $50 million

	%
Guardian Insurance (1), N.Y.	22.5
Citizens Chillicothe (B), Mo.	21.0
First Trust Corp, Colo.	20.9
US Natl. of Galveston	19.8
First of Oklahoma	18.9
Nationwide Life Ins., Ohio	18.1
State Natl., Evanston, Ill.	18.1
Confederation Life, Ont.	17.7
First of Omaha (D)	17.5
Bank of Virginia	17.5

Under $10 million

	%
Bankers Life, Iowa	17.6
Pittsburgh Natl. (Comb Qms)	17.1
First of Neenah, Wis.	16.2
Wheeling Dollar Bank, W.Va.	15.7
Unibanctrust, Ill.	15.2
First Natl. of Commerce, La.	15.1
Union Central, Ohio	14.6
Old Second Natl., Ill.	14.1
Union Trust Baltimore (D)	14.0
American Natl. Bank, Ind.	14.0

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FIRST UNION

CAPITAL MANAGEMENT GROUP

1200 First Union Plaza, CMG 16 Charlotte, NC 28288

*Based on Risk Return Performance Comparisons report issued by Frank Russell Company for Investment Advisor Separate Accounts and Balanced Separate Accounts for five years ending 12/31/85. Universe includes over 120 portfolios.

First of Omaha (D), Neb.	21.7
Texas Commerce	21.6
US Natl. of Galveston, Texas	21.5
First Wis. Natl., Madison	21.4
Pittsburgh Natl. (GRP QMS)	21.4
Provident National, Pa.	21.3
MTrust, Texas	21.2
First Kentucky Trust	21.2
Continental Bancorp, Pa.	21.2
Bank of the West, Calif.	21.2
Prudential, N.J.	21.1
John Hancock (1L), Mass.	21.0
First Fidelity Bank, N.J.	21.0
Old Kent, Mich.	20.9
Republic Natl., Dallas	20.7
Summit Trust Co., N.J.	20.7
US Natl. of Oregon	20.7
Colorado National Bank	20.6
Seattle Trust, Wash.	20.5
First of Neenah, Wis.	20.5
Citytrust (E1), Conn.	20.5
Gary Wheaton Bank, Ill.	20.5
Bank of Delaware	20.4
Natl. Bank of Commerce, Tenn.	20.4
First Variable Life, Ark.	20.4
Great West Life, Manitoba	20.4
Massachusetts Mutual	20.4
First Jersey Natl., N.J.	20.3
American Natl. Bank, Ind.	20.3
Society National, Ohio	20.3
Bank of Tokyo, N.Y.	20.3
State Natl., Evanston, Ill.	20.3
AmSouth, Ala.	20.1
First Wisconsin Trust	20.1
Standard & Poor's 500	**19.4**

10-year returns

	%
Manufacturers Life, Ontario	25.1
Guardian Insurance (1), N.Y.	22.5
First Wis. Natl., Madison	21.5
Citizens Chillicothe (B), Mo.	21.0
First Trust Corp., Colo.	20.9
American Natl., Chicago	20.8
US Natl. of Galveston, Texas	19.8
First Interstate of Denver	19.2
Sun Bank, Fla.	19.1
First of Oklahoma	18.9
US Natl. of Oregon	18.6
First Union Bank, N.C.	18.4
Natl. Bank of Commerce, Neb.	18.4
Provident National, Pa.	18.4
Bessemer Trust, N.Y.	18.3
Nationwide Life Ins., Ohio	18.1
Manufacturers Detroit	18.1
State Natl., Evanston, Ill.	18.1
MTrust, Texas	17.9
New England Mutual, Mass.	17.9
Continental Bancorp, Pa.	17.7
Confederation Life, Ontario	17.7
Bankers Life, Iowa	17.6
First of Omaha (D), Neb.	17.5
Bank of Virginia	17.5
First of America, Mich.	17.5
First Variable Life, Ark.	17.5
Equitable Life (4), N.Y.	17.4
Employers Life of Wausau (1)	17.3
First Jersey Natl., N.J.	17.1
Pittsburgh Natl. (COMB QMS)	17.1
Massachusetts Mutual	17.0
MTrust, Fort Worth, Texas	16.9
IAA Trust Co. (C), Ill.	16.8
Fifth Third Bank, Ohio	16.8
Penn Mutual Life (A), Pa.	16.8
Aetna Life & Cas., Conn.	16.6
National City Cleveland	16.5
Bank of Tokyo, N.Y.	16.4
First Interstate of Oregon	16.3
AmSouth, Ala.	16.3
Texas Commerce	16.2
First of Neenah, Wis.	16.2
First Natl. Lincoln, Neb.	16.2
First Interstate of Wash.	16.2
Philadelphia National	16.1
Liberty National, Okla.	16.0
Valley Fidelity, Tenn.	15.9
Chicago Title & Trust	15.9
Omaha Natl. Bank, Neb.	15.9
United of Denver	15.9
Home Life, N.Y.	15.9
Standard & Poor's 500	**14.7**

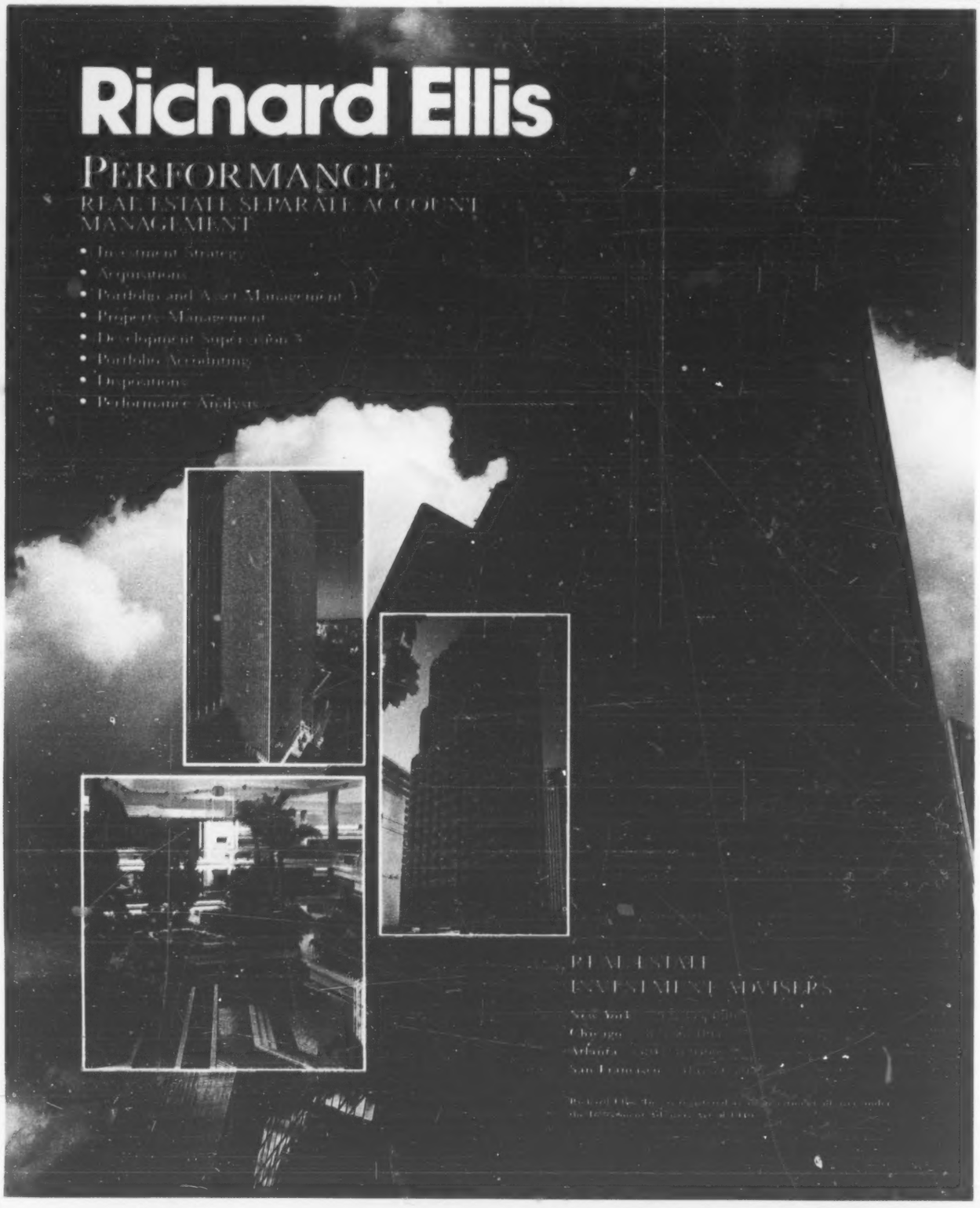
Top quartile commingled fixed-income funds

3-month returns

	%
Wellington Trust (Emerg.), Mass.	3.3
United of Denver	3.2
First Variable Life, Ark.	3.1
Provident National, Pa.	2.9
First of Shreveport, La.	2.9
Mercantile Natl., Ind.	2.8
Norstar Trust Co., N.Y.	2.8
Morgan Guaranty, N.Y.	2.7
Northern Central, Pa.	2.7
Connecticut Natl. Bank (EB)	2.7
Wilmington Trust, Del.	2.7
Philadelphia Natl., Pa.	2.6
First Wis. Natl., Madison	2.6
First of Chicago	2.6
Lloyds Bank (C), Calif.	2.6
Associated Manitowoc, Wis.	2.5
Frost National, Texas	2.5
Michigan Natl. of Detroit	2.5
Mercantile Safe, Md.	2.5
Hawaiian Trust (Def.)	2.5
Sun Bank, Fla.	2.5
Travelers (D), Conn.	2.5
Union Natl. Wichita, Kan.	2.5
First Interstate of Ariz.	2.5
Home Life, N.Y.	2.5
Citicorp, N.Y.	2.5
Chase Manhattan (Short-inter.)	2.4
Bankers Life, Iowa	2.4
AmeriTrust, Ohio	2.4
Union Trust, Baltimore	2.4
First Natl. of Commerce, La.	2.4
Union Central, Ohio	2.4
Crown Life, Ontario	2.4
First Interstate of Denver	2.4
Prudential (VCA 8), N.J.	2.4
Connecticut Bank & Trust	2.4
Seattle Trust, Wash.	2.4
First of Penna., Erie	2.4
Trust Svcs of Amer., Calif.	2.4
Marine Midland, N.Y.	2.4
First of Neenah, Wis.	2.4
Interfirst Bank Dallas	2.4
Alaska Pacific Trust	2.4
Pioneer Bank, Ill.	2.4
Jefferson Trust, Ill.	2.4
First of Cincinnati	2.4
Calcasieu Marine Natl. (E), La.	2.4
First Midwest, Moline, Ill.	2.4
AmSouth, Ala.	2.4
Valley Fidelity, Tenn.	2.4
Summit Trust Co., N.J.	2.4
Long Island Trust, N.Y.	2.4
AmeriTrust, Ohio	2.4
Puget Sound Natl., Wash.	2.4
Shawmut Bank (Intermed.), Mass.	2.4
American Natl. Bank, Ind.	2.4
First of Elgin (D1), Ill.	2.4
Greeley Natl., Colo.	2.4
South Carolina Natl. (F), S.C.	2.4
Wheeling Dollar Bank, W. Va.	2.4
American Natl. Bank, Tenn.	2.4
Liberty National, Okla.	2.4
Shearson Lehman Index	**2.4**

1-year returns

United of Denver	3.2
Centerre Trust, Mo.	3.1
Equitable Life (5), N.Y.	3.1
First Interstate of Denver	3.1
Chase Manhattan, N.Y.	3.1
Manufacturers Life, Ontario	3.1
LaSalle National, Ill.	3.1
Hawaiian Trust (Bond)	3.1
Metropolitan Life (41), N.Y.	3.1
Citicorp, N.Y.	3.1
Connecticut National Bank (EB)	3.1
Bankers Life, Iowa	3.1
Travelers (P), Conn.	3.1
CIGNA Corp., Conn.	3.1
Republic Natl., Dallas	3.1
Fidelity Bank, Pa.	3.1
First Interstate of Ariz.	3.1
Life of Virginia	3.1
First Trust Corp., Colo.	3.1
Natwest USA, N.Y.	3.1
Philadelphia Natl., Pa.	3.1
Trust Co. of Georgia	3.1
Connecticut Natl. (Intermed.)	3.1
Natl. Bank of Commerce, Neb.	3.1
Continental Illinois	3.1
Chase Manhattan (A), N.Y.	3.1
John Hancock, Mass.	3.1
MTrust, Texas	3.1
IAA Trust Co. (B), Ill.	3.1
Provident National, Pa.	3.1
American Security, D.C.	3.1
Wellington Trust (Intermed.)	3.1
Comerica Bank, Mich.	3.1
First Jersey Natl., N.J.	3.1
Morgan Guaranty, N.Y.	3.1
Manufacturers Hanover, N.Y.	3.1
First Kentucky Trust	3.1
Citizens & Southern, Ga.	3.1
First Variable Life, Ark.	3.1
First of Omaha (C), Neb.	3.1
Key Trust Co., N.Y.	3.1
Sovran Bank, Va.	3.1
Beverly Bank, Ill.	3.1
Bessemer Trust, N.Y.	3.1
First of Boston, Mass.	3.1
Aetna Life & Cas. (76), Conn.	3.1
Bank of New England, Mass.	3.1
Shawmut Bank (fixed), Mass.	3.1
Chemical Bank (2), N.Y.	3.1
Union Labor Life (F), D.C.	3.1
Lincoln Natl. Pens., Ind.	3.1
Prudential (VCA 7), N.J.	3.1
Shearson Lehman Index	**3.1**
Society National, Ohio	3.1
First City Natl., Houston	3.1
Liberty National, Ky.	3.1
Security Pacific (F), Calif.	3.1



Top fixed funds by size

1-year returns

Over $100 million

	%
Equitable Life (5), N.Y.	31.9
Chase Manhattan, N.Y.	30.7
Bankers Life, Iowa	25.9
CIGNA Corp., Conn.	25.7
Life of Virginia	23.3
Chase Manhattan (A), N.Y.	22.6
John Hancock, Mass.	22.4
American Security, D.C.	22.0
Manufacturers Hanover, N.Y.	21.7
Aetna Life & Cas. (76), Conn.	21.2

$50 million to $100 million

	%
Centerre Trust, Mo.	32.8
First Interstate of Denver	31.0
Metropolitan Life (41), N.Y.	26.9
Citicorp, N.Y.	26.7
Travelers (P), Conn.	25.8
Trust Co. of Georgia	22.8
Continental Illinois	22.7
Provident Natl., Pa.	22.2
Comerica Bank, Mich.	21.9
First Kentucky Trust	21.6

$10 million to $50 million

	%
United of Denver	34.2
Hawaiian Trust	27.1
Fidelity Bank, Pa.	24.3
Natwest USA, N.Y.	23.1
Philadelphia Natl.	23.1
Connecticut Natl. Bank	22.8
Natl. Bank of Commerce	22.7
MTrust, Texas	22.3
Wellington Trust, Mass.	22.0
Citizens & Southern, Ga.	21.5

Under $10 million

	%
Manufacturers Life, Ont.	28.6
LaSalle National, Ill.	28.3
Connecticut National Bank	25.9
First Interstate of Ariz.	23.5
First Trust Corp., Colo.	23.2
IAA Trust Co. (B), Ill.	22.2
First Variable Life, Ark.	21.4
Key Trust Co., N.Y.	21.3
Beverly Bank, Ill.	21.2
Union Natl., Wichita, Kan.	20.2

10-year returns

Over $100 million

	%
Life of Virginia	13.4
Texas Commerce	12.5
American Security, D.C.	12.4
Manufacturers Hanover, N.Y.	12.2
Boatmen's Natl., Mo.	11.9
CIGNA Corp., Conn.	11.7
John Hancock, Mass.	11.6
Bank of New England, Mass.	11.6
Mercantile Trust, Mo.	11.5
Wachovia Bank, N.C.	11.0

$50 million to $100 million

	%
Sovran Bank, Va.	13.2
Centerre Trust, Mo.	13.1
Pacific Mutual, Calif.	13.0
Hibernia Natl., La.	12.5
First Interstate of Denver	12.1
First Kentucky Trust	11.9
Manufacturers Detroit	11.7
Citicorp, N.Y.	11.7
Bankers Trust (B), N.Y.	11.3
First Fidelity Bank, N.J.	11.3

$10 million to $50 million

	%
United of Denver	13.4
Bank IV, Wichita, Kan.	13.3
Fidelity Bank, Pa.	12.6
Seafirst Bank, Wash.	12.4
First Wis. Natl., Madison	12.0
American Natl. Bank, Tenn.	11.6
Lloyds Bank (C), Calif.	11.5
Merchants Natl., Pa.	11.4
Commerce Union, Tenn.	11.4
Indiana National Bank	11.2

Under $10 million

	%
Beverly Bank, Ill.	12.7
Central Fidelity, Va.	12.0
First Interstate of Ariz.	11.9
Connecticut National Bank	11.4
Key Trust Co., N.Y.	11.2
IAA Trust Co. (B), Ill.	11.1
Oregon Bank	11.1
First of Maryland	11.1
First of Neenah, Wis.	10.9
Colonial American Natl., Va.	10.8
American Natl. Bank, Tenn.	20.4
Harris Trust, Ill.	20.4
Bank of California	20.4
Mellon Bank, Pa.	20.4
First Wisconsin Trust	20.3
Interfirst Bank, Dallas	20.3
Union Natl., Wichita, Kan.	20.2

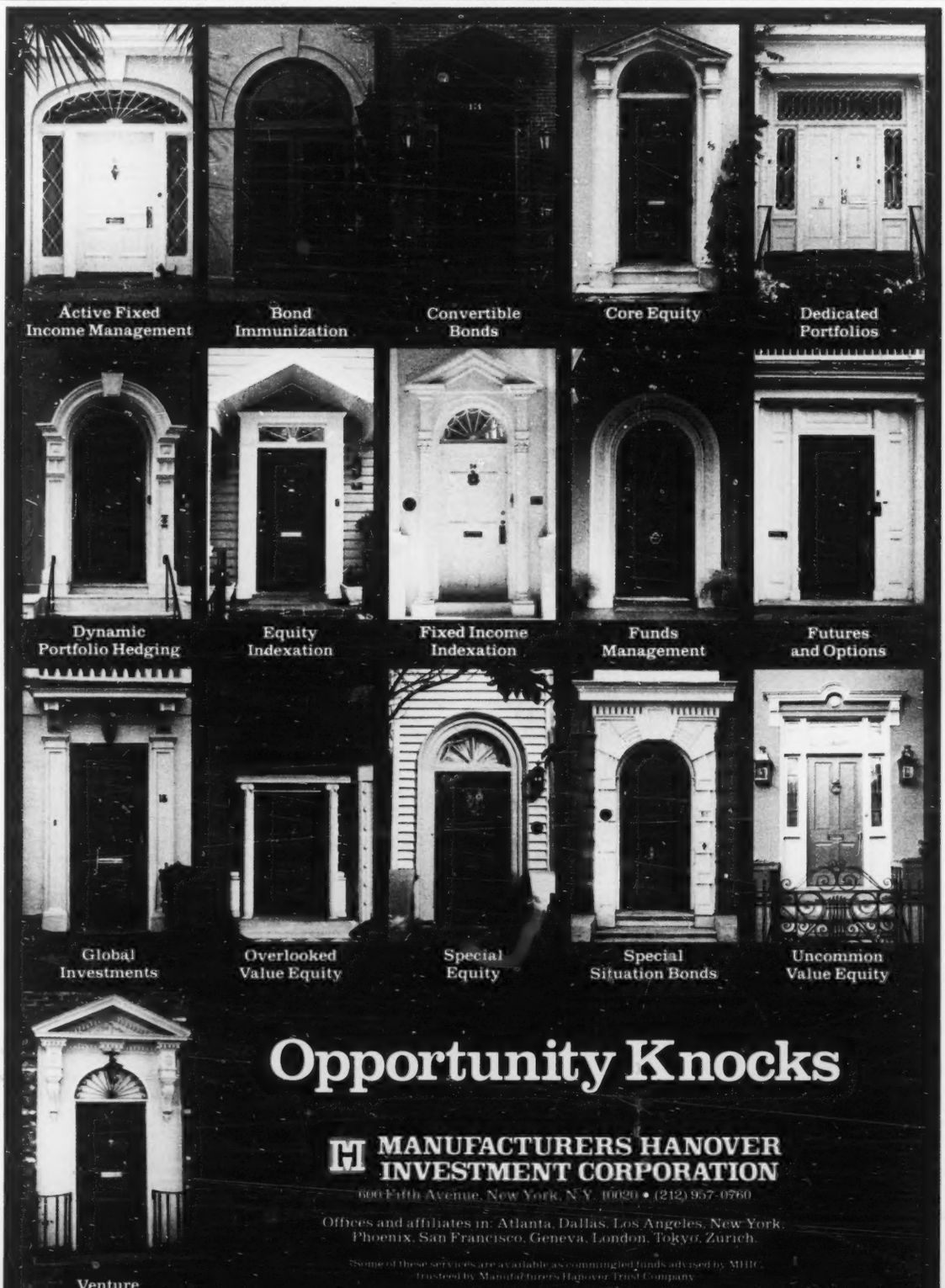
3-year returns

	%
United of Denver	21.7
Centerre Trust, Mo.	20.5
First Interstate of Denver	20.3
Equitable Life (5), N.Y.	20.1
IAA Trust Co. (B), Ill.	18.9
Connecticut National Bank	18.8
Travelers (P), Conn.	18.8
Life of Virginia	18.6
Trust Svcs of America, Calif.	18.3
Manufacturers Life, Ontario	18.3
First Interstate of Ariz.	18.2
Citicorp, N.Y.	18.0
First Trust Corp., Colo.	17.6
Beverly Bank, Ill.	17.5
John Hancock, Mass.	17.4
Security Pacific (F), Calif.	17.3
Central Fidelity, Va.	17.2
Philadelphia Natl., Pa.	17.2
American Security, D.C.	17.2
Republic Natl., Dallas	17.2
CIGNA Corp. (Pub. traded), Conn.	17.1
First Kentucky Trust	17.1
First Variable Life, Ark.	17.0
Trust Co. of Georgia	17.0
Colorado National Bank	16.9
Pacific Mutual, Calif.	16.9
Bank of California	16.9
Morgan Guaranty, N.Y.	16.9
Hawaiian Trust (Bond)	16.8
First of Omaha (C), Neb.	16.7
Sovran Bank, Va.	16.7
Natwest USA, N.Y.	16.7
AmSouth, Ala.	16.7
Fidelity Bank, Pa.	16.6
First Wis. Natl., Madison	16.6
Connecticut National Bank	16.6
First Union Bank (1), N.C.	16.6
First Jersey Natl., N.J.	16.5
Wellington Trust (Intermed.)	16.5
First Interstate of Nevada	16.5
First of Chicago	16.5
Key Trust Co., N.Y.	16.5
Shearson Lehman Index	**16.5**
Lloyds Bank (C), Calif.	16.4
Liberty National, Ky.	16.4
Colonial American Natl., Va.	16.4
Mellon Bank, Pa.	16.4
Natl. Bank of Commerce, Neb.	16.3
Hamilton Bank, Pa.	16.3
Harris Trust, Ill.	16.3
Lincoln Natl. Pens, Ind.	16.3
Manufacturers Detroit	16.3
Provident Natl., Pa.	16.2
Northern Trust, Ill.	16.2
Aetna Life & Cas. (76), Conn.	16.2
Shawmut Bank, Mass.	16.2
Central Trust, Ohio	16.2
American Natl. Bank, Tenn.	16.2
CIGNA Corp. (Intermed.), Conn.	16.2
Society National, Ohio	16.2

5-year returns

	%
United of Denver	22.7
Centerre Trust, Mo.	22.0
First Interstate of Denver	21.8
Life of Virginia	21.7
Citicorp, N.Y.	20.5
First Kentucky Trust	20.2
Connecticut National Bank	20.1
Trust Svcs of Amer., Calif.	20.0
American Security, D.C.	20.0
First Wis. Natl., Madison	19.8
Sovran Bank, Va.	19.8
Equitable Life (5), N.Y.	19.7
John Hancock, Mass.	19.6
CIGNA Corp. (Pub. traded), Conn.	19.6
Society National, Ohio	19.6
Beverly Bank, Ill.	19.4
AmSouth, Ala.	19.4
IAA Trust Co. (B), Ill.	19.3
Pacific Mutual, Calif.	19.2
First Interstate of Ariz.	19.1
Colorado National Bank	19.1
Lloyds Bank (C), Calif.	18.9
CIGNA Corp. (Intermed.), Conn.	18.7
Key Trust Co., N.Y.	18.7
Bank of California	18.7
Marine Midland, N.Y.	18.7
First of Chicago	18.6
Travelers (D), Conn.	18.6
Morgan Guaranty, N.Y.	18.6
Bankers Trust (A), N.Y.	18.6
Associated Manitowoc, Wis.	18.6
Travelers (P), Conn.	18.5
Natl. Bank of Commerce, Neb.	18.5
Philadelphia Natl., Pa.	18.5
Wachovia Bank, N.C.	18.5
Mellon Bank, Pa.	18.5
Mutual of New York	18.5
Central Fidelity, Va.	18.4
First Variable Life, Ark.	18.4
Liberty National, Ky.	18.4

Continued on page 22



Stock funds lag index during 2nd quarter

WAYNE, Pa. — The median fund in the SEI Funds Evaluation Services Inc. universe returned 3.5% in the second quarter, as the stock market continued to climb and the bond market stumbled slightly.

The median equity-only return among funds in SEI's data base was 5.3%, compared with 5.9% for the Standard & Poor's 500 stock index. The median bond return was 1.6%, compared with 1.1% for the Salomon Brothers Broad Investment Grade bond index.

The stock market had a weak start in April but was buoyant during the remainder of the quarter. In the bond market, a steepening yield curve led to price increases for short-term issues and declines for bonds with longer maturities.

The median total fund in SEI's universe returned 14.9% for the six months ended June 30 and 26.1% for the 12 months. The median equity return was 22% for the six-month period and 37.8% for the year, compared with S&P 500 returns of 20.8% and 35.9%, respectively. The median bond return was 8.5% for the six months and 19% for the year, compared with 9% and 19.9%, respectively, for the Salomon Brothers index.

The best-performing stock market sector in the second quarter was consumer staples, which returned 16.1%. It returned 39% for the first six months of 1986 and 62.2% for the latest 12-month period.

Health stocks also had a double-digit gain in the quarter, with 15.1%. They were the top performer for the six-month period, returning 39.5%, and second to consumer staples in the 12-month period, with a 57% gain.

Four of the 11 stock market sectors tracked by SEI had negative returns in the quarter. These were producer durables, down 0.6%; building, down 2.8%; finance, down 3.9%; and transportation, down 7.5%. No sectors had negative returns for the longer periods.

Among bond market sectors, those issued by finance companies had the best quarterly return, up 2.2%. These issues were up 8.7% for the six months ended June 30 and 17.8% for the 12-month period.

Utility bonds performed best in the longer periods, with gains of 10.6% for the six months and 24.9% for the year. They returned just 0.7% in the second quarter.

As rated by quality, BBB rated bonds performed best in the quarter, with a gain of 1.8%. A rated issues gained 1.5%, while AAA and AA issues gained 1%. As rated by maturity, intermediate bonds performed best, up 1.4% in the quarter, while long-term issues were up just 0.2%.

The second quarter was marked by a slight increase in funds' commitments to cash equivalents, according to SEI. The median cash commitment was 6.8% as of June 30, up from 5.9% March 30. Median equity and bond commitments both dropped somewhat — equities to 54.2% from 55.2% and bonds to 31.5% from 32.9%.

The quarter saw increased interest in manager hirings, with defensive, value-oriented equity styles the most popular, SEI's report said. Also, international managers accounted for more than 25% of search activity.

Interest in portfolio insurance also increased, but pension fund executives had questions about the cost of these programs and whether they will work as promised. Other topics occupying pension executives during the quarter were asset allocation structures and policies.

Shearson Lehman Index	**18.3**
First of Omaha (C), Neb.	18.2
Hawaiian Trust (Bond)	18.2
Hamilton Bank, Pa.	18.1
Republic Natl., Dallas	18.1
Trust Co. of Georgia	18.1
Bank of New York	18.0
Natwest USA, N.Y.	18.0
State Street Bank, Mass.	17.9
American National, Minn.	17.9
First Trust Corp., Colo.	17.8
Fidelity Bank, Pa.	17.8
Toledo Trust, Ohio	17.8
Interfirst Bank, Dallas	17.8
First Jersey Natl., N.J.	17.8
Northern Trust, Ill.	17.8

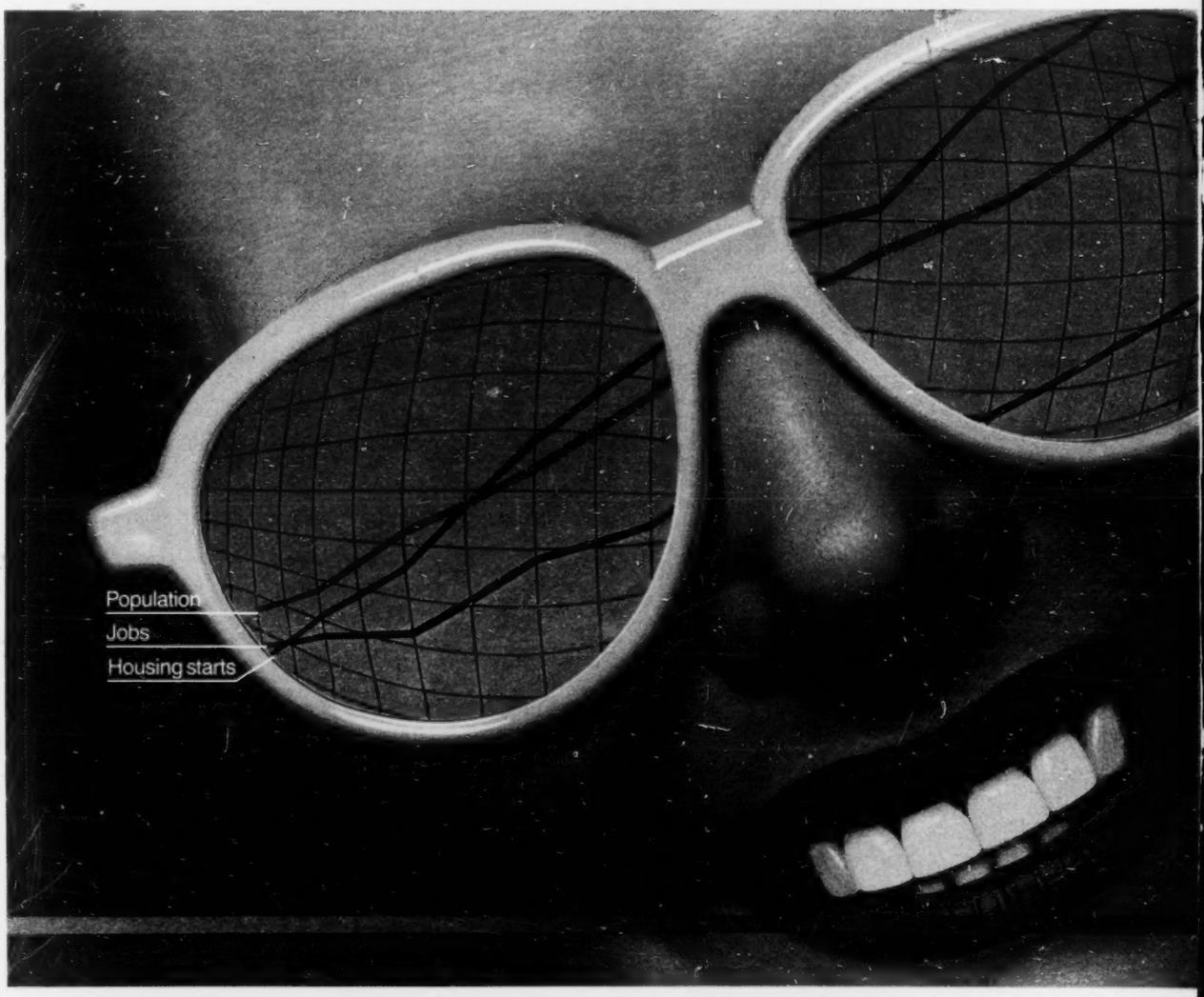
10-year returns

	%
Life of Virginia	13.4
United of Denver	13.4
Bank IV, Wichita, Kan.	13.3
Sovran Bank, Va.	13.2
Centerre Trust, Mo.	13.1
Pacific Mutual, Calif.	13.0
Beverly Bank, Ill.	12.7
Fidelity Bank, Pa.	12.6
First Jersey Natl., N.J.	12.6
Texas Commerce	12.5
Hibernia Natl., La.	12.5
American Security, D.C.	12.4
Seafirst Bank, Wash.	12.4
Manufacturers Hanover, N.Y.	12.2
First Interstate of Denver	12.1
First Wis. Natl., Madison	12.0
Central Fidelity, Va.	12.0
First Kentucky Trust	11.9
Boatmen's Natl., Mo.	11.9
First Interstate of Ariz.	11.9
Manufacturers Detroit	11.7
Citicorp, N.Y.	11.7
CIGNA Corp. (Pub. traded), Conn.	11.7
American Natl. Bank, Tenn.	11.6
John Hancock, Mass.	11.6
Bank of New England, Mass.	11.6
Lloyds Bank (C), Calif.	11.5
Mercantile Trust, Mo.	11.5
Connecticut National Bank	11.4
Merchants Natl., Pa.	11.4
Commerce Union, Tenn.	11.4
Bankers Trust (B), N.Y.	11.3
First Fidelity Bank, N.J.	11.3
US Trust, N.Y.	11.3
Indiana National Bank	11.2
Cullen Bank, Texas	11.2
Bankers Trust (A), N.Y.	11.2
Mellon Bank, Pa.	11.2
Allied Bank, Texas	11.2
Key Trust Co., N.Y.	11.2
Toledo Trust, Ohio	11.1
IAA Trust Co. (B), Ill.	11.1
Oregon Bank	11.1
Trust Svcs of Amer., Calif.	11.1
First Bank, Milwaukee	11.1
First of Maryland	11.1
Shearson Lehman Index	**10.9**

Special issues coming up in *Pensions & Investment Age*:

- Union pensions, Sept. 1.
- Directory of real estate advisers, Sept. 15.
- Institutional brokerage survey, Sept. 29.
- Public pensions, Oct. 13.
- Cash management survey, Oct. 27.

BellSouth



Copley keeps place . . .

Continued from page 27

Trust I led in the one-, three- and five-year periods ended March 31.

The group trust includes retail and office properties, and may include industrial properties in the future.

Chicago-based JMB had the highest returns of all funds in the PIPER real estate universe, reporting 23.2% for 12 months; a compound annual 21.9% for three years; and a compound annual 19.7% for five years.

Jerry Claeys, executive vice president, said Group Trust I stresses retail properties, especially regional malls.

Unlike most managers, who are about 20% invested in retail, about 60% of JMB's investments are in retail.

In conjunction with this, the company has a great deal of property management capabilities, Mr. Claeys said.

"We believe in property management," he said. "We have in-house capability to manage centers.

"We know what to do with them. All of this is translated into higher returns."

Others in the Top Five closed-end funds for the year were real estate equity funds.

LaSalle Realty Advisors Inc., Chicago, and Lehndorff & Babson Real Estate Counsel, Dallas, both newcomers to the PIPER Top Five, invest in equity real estate.

One-year returns for LaSalle and Lehndorff were 15.7% and 18.6%, respectively.

Returns of 15.6% and 14.9%, respectively, for the year kept Fund V of Coldwell Banker Capital Management Services, Los Angeles, and John Hancock Cos., Boston, among the Top Five funds.

Following JMB in the three-year period were State Street Bank and Trust Co., Boston, which returned 17.6%; Coldwell Banker Fund V, 17.5%; LaSalle Advisors, 16.4%; and Coldwell Banker Fund II, 16%.

In the five-year returns, JMB was followed by Coldwell Banker Funds II, V and IV, which had returns of 19.2%, 16.2% and 13.4%, respectively.

LaSalle Advisors' fund returned 16.9% for the period.

Coldwell Banker Capital Management Services' Fund II was the only closed-end fund with a 10-year return.

For the 10 years ended March 31, the fund returned 21.6% compounded annually. ■

Real Estate Open-end funds

Period ended March 1986

1-year returns

	%
Copley Real Estate Adv.	20.7
Prudential (MORISA)	18.8
Mutual Benefit Life	18.3
Prudential (PRIMOR)	16.5
Morgan Guaranty	15.6
Chase Manhattan	15.4
CIGNA Corp.	13.7
Wachovia Bank	13.1
NCNB Natl. Bank	12.8
Bank One Trust, Columbus	12.8
Aetna Life & Cas. (PMSA)	12.7
Citicorp	12.1
First of Boston	11.0
First of Chicago (F)	10.6
United Virginia Bank	10.5
Equitable Life	10.4
Republic National	10.0
Massachusetts Mutual	10.0
Metropolitan Life	9.9
Third Natl., Nashville	9.8
Travelers	9.7
Sun Bank	9.3
Aetna Life & Cas. (RESA)	9.2
Bankers Life, Iowa	9.2
First of Minneapolis	8.6
John Hancock	8.3
Prudential (PRISA)	8.0
Metropolitan Life (Tower)	6.3
Interfirst Bank, Dallas	6.2
Seafirst Bank	5.9
Lloyds Bank (F)	4.7
Consumer Price Index	**2.2**

3-year returns

	%
Copley Real Estate Adv.	20.4
Mutual Benefit Life (VCA-5)	17.7
Prudential (MORISA)	17.0
NCNB National Bank	16.6
Metropolitan Life	16.5
Morgan Guaranty	15.9
Prudential (PRIMOR)	15.6
Aetna Life & Cas. (PMSA)	15.1
Chase Manhattan	15.1
First of Minneapolis	14.5
Equitable Life	14.2
CIGNA Corp	14.0
Metropolitan Life (Tower)	13.8
First of Chicago (F)	12.3
Bank One Trust, Columbus	12.3
Citicorp	12.2
First of Boston	12.0
Aetna Life & Cas. (RESA)	11.7
Wachovia Bank	11.6
Prudential (PRISA)	11.6
United Virginia Bank	11.4
Sun Bank	11.2
Interfirst Bank	10.9
Bankers Life, Iowa	10.9
Massachusetts Mutual	10.8
John Hancock	10.6
Republic Natl., Dallas	10.3
Third Natl., Nashville	9.6
Travelers	8.6
Seafirst Bank	7.5
Lloyds Bank (F)	7.3
Consumer Price Index	**3.5**

5-year returns

	%
Aetna Life & Cas. (PMSA)	17.0
Morgan Guaranty	16.6
NCNB Natl. Bank	16.3
Wachovia Bank	14.4
Metropolitan Life	14.4
Bank One Trust, Columbus	13.6
Equitable Life	13.2
First of Boston	12.9
First of Chicago (F)	12.8
Interfirst Bank, Dallas	12.1
Metropolitan Life (Tower)	12.0
Aetna Life & Cas. (RESA)	11.7
Prudential (PRISA)	11.0
John Hancock	10.7
Travelers	10.4
Third Natl., Nashville	10.3
Citicorp	9.9
Seafirst Bank	9.9
Consumer Price Index	**4.2**

10-year returns

	%
Morgan Guaranty	18.5
Wachovia Bank	14.8
Prudential (PRISA)	14.7
Metropolitan Life	13.4
Equitable Life	13.0
First of Boston	12.4
First of Chicago (F)	12.2
Consumer Price Index	**6.9**

Real Estate Closed-end funds

Period ended March 1986

1-year returns

	%
JMB Institutional (I)	23.2
Lehndorff & Babson	18.6
LaSalle Advisors	15.7
Coldwell Banker (V)	15.6
John Hancock (Sera 1)	14.9
Equitable Life (16I)	14.8
Landauer Advisors (I)	14.7
State Street Bank (I)	14.5
Rosenberg (Mid-Am II)	14.2
Rosenberg (Mid-Am III)	14.0
Aetna Life & Cas. (I)	13.8
Coldwell Banker (II)	13.8
Coldwell Banker (VII)	11.9
Sarofim Trust Co.	11.7
Rosenberg (West V)	11.3
Rosenberg (REEF III)	11.3
JMB Institutional (II)	11.0
Rosenberg (USA I)	10.8
CIGNA Corp.	10.7
Aetna Life & Cas. (II)	10.3
Coldwell Banker (IV)	10.3
JMB Institutional (III)	10.2
State Street Bank (II)	9.6

At NCNB, We Follow The Philosophy Of The Pharaohs.

They knew two things were critical to solid real estate investments. Quality construction and teamwork. Given the enduring results of that way of thinking, NCNB insists on it too.

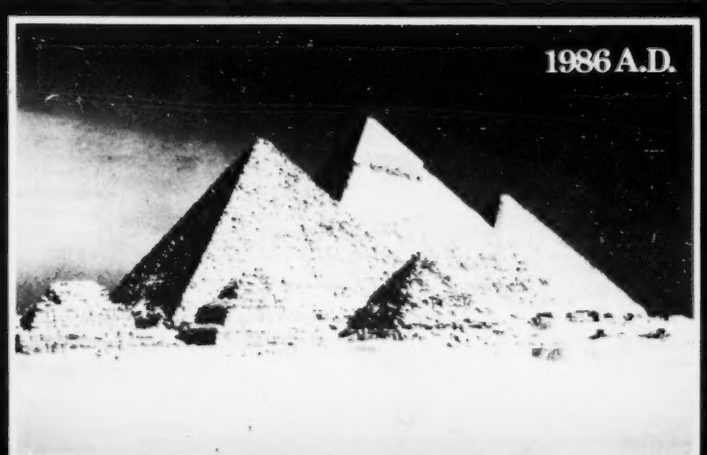
Our experienced team of development, architectural, construction, and property management specialists work exclusively with high-quality properties, located primarily in the Southeast. And our dedication to quality and teamwork has paid substantial dividends.

With consistently high returns, the NCNB Real Estate Fund has climbed to the peak of the industry in recent years. We've cemented our place at the top of the open-end fund universe with an average annual return of 16.4%* over the last five years. Our ten-year average is just as impressive.

Many real estate investments may look good in the short run, but The NCNB Real Estate Fund has passed the ultimate test...the test of time. Call Mark Coltrin, NCNB Trust Group Vice-President for details at (704) 374-8405.

*As reported by CDA Investment Technologies, Inc. for the period ending 12/31/85.

NCNB



NCNB REAL ESTATE FUND

Asbestos hot issue . . .

Continued from page 27

He noted if there is any litigation in regard to the asbestos, the liability now is in the hands of county officials, not the retirement fund.

While Mr. Russin's desire not to own a building with asbestos is not uncommon today, it does raise some serious questions, according to TCW's Mr. Martin.

To think the matter is only one of up-front costs — the costs of taking out the asbestos — is misleading, he said. He doesn't believe an investor can get a 100% guarantee that all the asbestos has been removed from a building.

Mr. Saylor of Pension Real Estate Services agreed. He said because the industry handling the asbestos problem is new, a fund would have trouble getting anyone to sign-off on having corrected the problem.

Even if most of the asbestos is removed, Mr. Martin noted, an insurer still might not provide coverage on asbestos problems. And because asbestosis has a 40-year latency period, it is a difficult problem to insure against.

Another question involves tenants, Mr. Martin said. Employers increasingly may become wary of renting space in office buildings containing asbestos out of fear of being sued by employees. As a result, buildings without asbestos could get more in rent and be more fully leased, all else being equal.

Steven Brabant, a vice president with John McMahan Associates, San Francisco, said, "We have our inspecting architect give us certification that buildings that we are buying have no asbestos. Everytime I say I will never do something, it always comes up where you will do it, but it would be a very, very, very rare situation that we would buy a building that had an asbestos problem."

McMahan Associates has no such buildings now.

"The nagging risk is that before you get it (an asbestos problem) corrected, someone is going to sue you, or that you correct it, and they bring up the lawsuit anyway, with some attorney arguing that you really didn't correct it. It's not a problem I would want to buy into," Mr. Brabant added.

But if there are no buyers for such buildings, what are those buildings worth, Mr. Martin asked. If there is only one buyer for a building, the buyer can name his price.

Mr. Saylor said if a commingled fund has asbestos properties, the yields and the performance in the unit values of the fund are bound to be somewhat inflated.

"If there is no buyer for the building, you can make a good case that the value of the building is zero," Mr. Saylor said. "However, if you have a $100 million building and it costs $50 million to correct the asbestos, maybe you have got a $50 million building, or some way of discounting value over time, and that is not being reflected in the performance data that managers are presenting to commingled fund investors."

But not every building constructed between the 1950s and 1970s contains asbestos, according to Eric Mayer, chairman of the board for Center Properties, a subsidiary of Heitman Advisory, Chicago.

According to various real estate experts, asbestos fireproofing really isn't a problem in retail centers and industrial buildings. In those buildings, less fireproofing is required and it is easier to remove.

Also, if asbestos was used for insulating piping, rather than being sprayed on structural steel as a fire retardant, it is far easier to remove, said John Rowen, executive vice president with Asbestos Abatement.

Removal costs anywhere from $10 to $14 per square foot, a high price in multimillion-square-foot office buildings. And that cost doesn't include re-fireproofing the building, another $3 to $6 per square foot.

Although there are alternatives to removing the asbestos, such as encapsulating it or surrounding it with drywall, Mr. Accomando said these measures are temporary because encapsulating material can deteriorate with time and drywall can easily be breached.

The real estate funds most likely to have properties in them with asbestos are the older funds that were buying real estate in the 1970s.

One of the oldest is the $5 billion Prudential Asset Management, Newark, N.J.. Prudential Property Investment Separate Account, an open-end fund with dozens of major pension fund clients.

Don Davis, a senior portfolio manager with Prudential Asset Management, said PRISA does have some buildings with asbestos — 76 out of 214 office buildings built prior to 1979.

The buildings have been carefully monitored for asbestos particles in the air, and none exceeds OSHA's new standards, Mr. Davis said.

Mr. Davis said he now would want to look carefully at any deal involving a building containing asbestos.

Continued on page 30

Rosenberg (REEF II)	9.2
Rosenberg (REEF I)	9.0
Metropolitan Life (I)	9.0
Coldwell Banker (III)	8.5
Rosenberg (Mid-Am I)	6.9
Coldwell Banker (VI)	6.9
Rosenberg (REEF IV)	5.9
Rosenberg (USA II)	3.1
Consumer Price Index	**2.2**

3-year returns

	%
JMB Institutional (I)	21.9
State Street Bank (I)	17.6
Coldwell Banker (V)	17.5
LaSalle Advisors, III.	16.4
Coldwell Banker (II)	16.0
Sarofim Trust Co. (P-I)	15.8
Rosenberg (Mid-Am II)	13.3
Equitable Life (16I)	13.2
Rosenberg (REEF III)	12.3
Coldwell Banker (IV)	12.1
Rosenberg (REEF II)	11.4
Rosenberg (USA I)	10.9
Coldwell Banker (VII)	10.9
CIGNA Corp.	10.6
Coldwell Banker (III)	10.3
Rosenberg (USA II)	10.0
Rosenberg (REEF I)	9.3
Coldwell Banker (VI)	9.3
Rosenberg (REEF IV)	7.8
Rosenberg (Mid-Am I)	7.4
Consumer Price Index	**3.6**

5-year returns

	%
JMB Institutional (I)	19.7
Coldwell Banker (II)	19.2
LaSalle Advisors, III.	16.9
Coldwell Banker (V)	16.2
Coldwell Banker (IV)	13.4
Rosenberg (REEF I)	12.2
Rosenberg (REEF II)	12.0
Coldwell Banker (VI)	11.3
Coldwell Banker (III)	10.7
Consumer Price Index	**4.2**

10-year returns

	%
Coldwell Banker (II)	21.6
Consumer Price Index	**6.9**

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Quite a few years ago, Wachovia developed a new formula for pension fund real estate investment — a formula so unique and yet so effective (see the chart at left), it took Wachovia to conceive it.

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When demand for real estate is up, Wachovia develops land previously acquired, creating value to add to the portfolio at lower cost. Our active, hands-on involvement in development and management is our assurance of enduring property quality.

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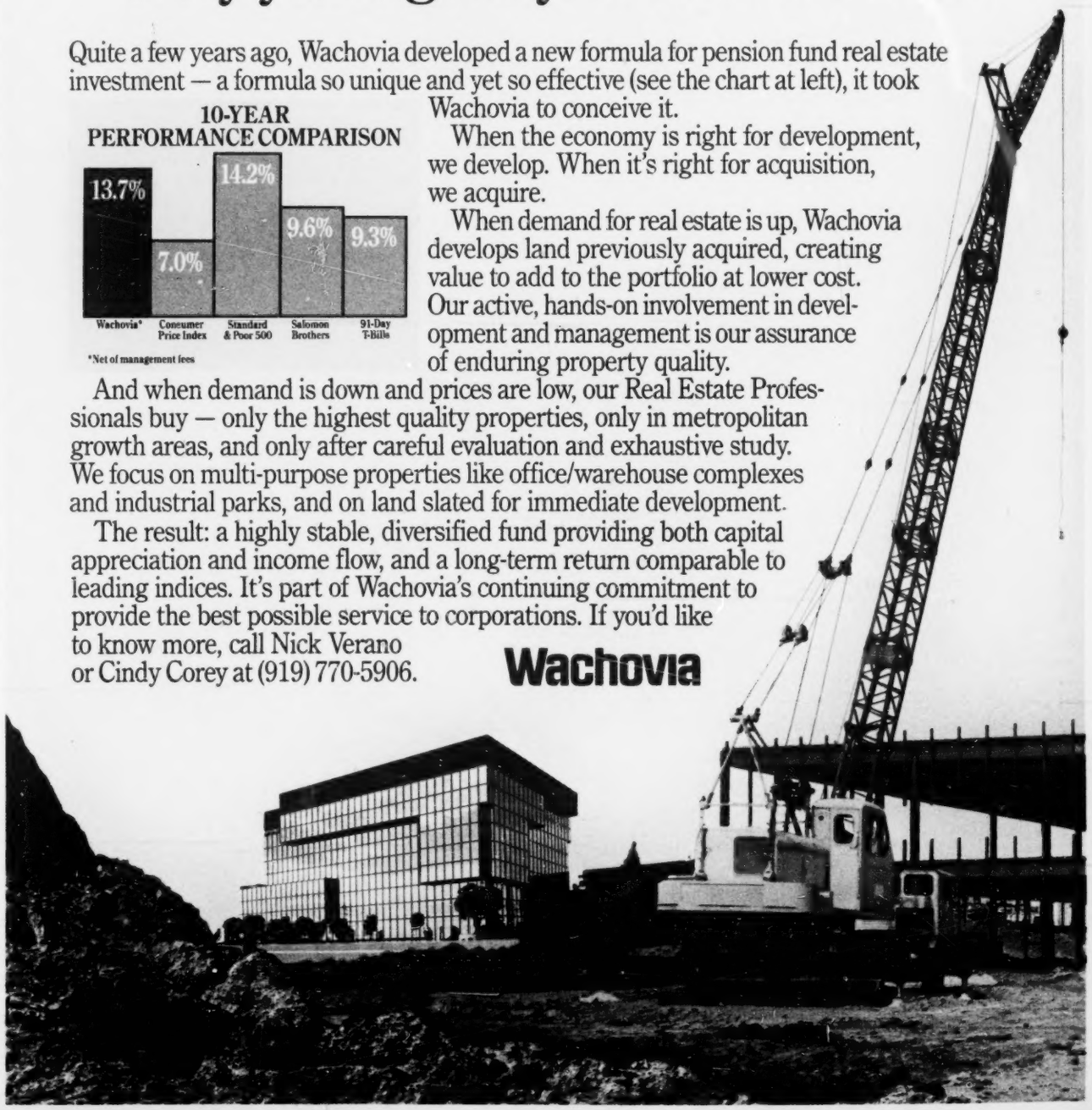
The result: a highly stable, diversified fund providing both capital appreciation and income flow, and a long-term return comparable to leading indices. It's part of Wachovia's continuing commitment to provide the best possible service to corporations. If you'd like to know more, call Nick Verano or Cindy Corey at (919) 770-5906.

Wachovia

10-YEAR PERFORMANCE COMPARISON

*Net of management fees



Cash Management

Third-party financing gaining popularity

By Chuck Paustian

Companies increasingly are turning to third-party finance corporations as a source of off-balance sheet financing to meet their short-term capital needs.

For example, five units of The Coca-Cola Co., Atlanta, sold a portion of their accounts receivables to EBS Finance Corp., New York, for an undisclosed amount.

EBS Finance, the third-party finance company formed by Coca-Cola, is using the accounts receivables to meet interest and principal payments on a new private placement of commercial paper. Salomon Brothers Inc., New York, is serving as the agent for the private placement.

Coca-Cola has unconditionally guaranteed the collectibility of those receivables, according to the prospectus.

Other corporations — including American Airlines Inc., Fort Worth, Texas, and Sperry Corp., New York — have used similar off-balance sheet financing techniques in the past.

These complex transactions allow corporations to use their strong creditworthiness to raise capital quickly without carrying the debt obligations on their balance sheets.

Although such transactions are not new, they have been gaining in popularity.

"I would think this (a third-party financing) goes to the top level of sophistication," said C. Reed Parker, executive vice president and vice chairman of the rating committee at Duff & Phelps Inc., Chicago.

Mr. Parker also said these transactions have become more popular in recent years.

Matthew Devine, director of banking and investments at American Airlines, agreed. "I think when we created our captive finance company, there weren't too many in existence. I think they have subsequently grown in popularity," he said.

Not only have the number of third-party finance companies increased, but also the number of corporations using this technique.

The Commercial Industrial Trade-Receivables Investment Co., a limited partnership organized in Harrison, N.Y., with Citicorp Asset Management Inc. as general partner, was established in 1983 with one corporation as a limited partner.

As of the end of June 30, the number of limited partners had grown to 16 and the amount of outstanding commercial paper totaled $1.44 billion.

The partnership's commercial paper is supported by a standby purchase commitment from Citibank, New York, and has been given the highest ratings by Duff & Phelps and Moody's Investors Service and Standard & Poor's Corp., both of New York.

In a third-party financing arrangement, a company sells a pool of assets, usually accounts receivables, to a finance corporation, which uses the assets to meet the interest and principal payments of commercial paper or other debt instruments, said industry experts.

The debt instruments receive high-quality credit ratings because they are backed by either a guarantee from the receivables-generating company or more traditional bank lines of credit.

Because the third-party corporation is not a subsidiary, the receivables-generating company is not obligated to carry the receivables or the debt obligations on its balance sheet, the industry sources said.

In the EBS Finance transaction, the Coca-Cola units, three subsidiaries and two wholly owned partnerships, sold the receivables to the third-party finance company, said Robert Wermuth, manager of corporate and U.S. treasury services at Coca-Cola.

The three subsidiaries are Columbia Pictures Industries Inc., CPT Holdings Inc. and Tandem Licensing Corp. The two wholly owned partnerships are Embassy Pictures and Embassy Television.

"EBS is a special-purpose corporation that was set up to handle details of the sales of accounts receivables for the entertainment sector of the company," he said.

Mr. Wermuth would not say how much in receivables were being transferred to EBS Finance, the amount of commercial paper to be issued or how the transaction affected Coca-Cola's balance sheet.

A source close to the transaction, however, said the transaction is not carried on Coca-Cola's balance sheet.

"The transactions have been completed and are not reflected on the balance sheet of The Coca-Cola Co. They're reflected only on the books of EBS Finance Corp.," said the source, who asked not to be identified.

Most of the EBS Finance transactions have been private placements in both the domestic and European markets.

"It's just an additional source of financing for those businesses," he said. As of March 31, EBS Finance had $545 million in commercial paper outstanding.

Mr. Wermuth did say the proceeds from the transaction will be used for the general purposes of the entertainment sector.

Although Coca-Cola does not own any part of EBS Finance, the third-party finance corporation only deals with Coca-Cola. Mr. Wermuth would not comment on whether EBS Finance could do business with other corporations or what role Coca-

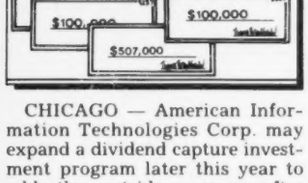
Continued on page 3

Payden & Rygel index of short maturity assets*
(for month ended July 31)

	July 1986	Quarter ended 6/30/86	Year to date	12 months ended 7/31/86	Yield level monthly change*
	Unannualized total returns				
90-day					
U.S. Treasury bill	0.5493	1.6779	4.2033	7.5611	−17
Domestic CD	0.6079	1.8351	4.5400	8.0943	−26
Euro $ CD	0.6053	1.8711	4.5896	8.2176	−21
180-day					
U.S. Treasury bill	0.5921	1.7909	4.6400	8.2450	−15
Domestic CD	0.6283	1.9687	4.8171	8.5062	−19
Euro $ CD	0.5999	2.0111	4.8350	8.6616	−10
1-year					
U.S. Treasury note	0.7287	1.9571	5.4196	9.4843	−21
2-year					
U.S. Treasury note	1.0040	1.9575	6.9535	12.9423	−24

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. 90- and 180-day Treasury bill yield level changes on discount basis.
*Basis points.
Source: Payden & Rygel, Los Angeles

Ameritech may expand capture program



CHICAGO — American Information Technologies Corp. may expand a dividend capture investment program later this year to add other outside managers after the initial success with Jefferies & Co., said Robert J. Kolbe, Ameritech's director of banking relations.

For the first six months of the year, Ameritech earned annualized returns of 12.39% before tax and 10.87% after tax, according to John Eberle, Chicago-based senior vice president of Jefferies.

Mr. Kolbe, who confirmed the returns, said Ameritech put $5 million in corporate cash in the program at the beginning of the year.

The amount is a small percentage of Ameritech's total corporate cash. Its total cash varies, he said, adding that at the end of June it was around $100 million.

The bulk of its cash is in money-market instruments, he added.

He said Ameritech was trying the dividend strategy on a pilot basis.

The company is considering hiring other investment managers for similar dividend strategies, investing a larger share of corporate cash, he said.

"We have a number we are looking at and we will probably do something later this year, assuming its continued success," Mr. Kolbe said. He declined to name the managers.

He said pending congressional tax legislation might cause Ameritech to rethink the investment strategy.

But at this time, he said the strategy would still retain advantages over fully taxable investments.

The strategy requires Ameritech to hold the dividend-yielding stocks for at least 46 days to qualify for the 85% corporate exclusion on dividends.

According to Mr. Eberle, Jefferies invests the cash in flat-rate preferred stocks, while at the same time totally hedging the portfolio against interest rate increases. To hedge, he said, Jefferies uses 2% or 3% of the Ameritech cash it runs to buy puts on 20-year Treasury bond futures contracts.

"The 20-year bond futures correlate most closely with the preferred stocks," Mr. Eberle said.

He said Ameritech's returns were about 2½ percentage points better than the after-tax yields on 30-day certificates of deposit and two to three percentage points higher than 30-day municipal securities or 49-day auction rate preferred stock.

National Health hires

DOTHAN, Ala. — Seeking to

Continued on page 39

New format, CTP seen coexisting

By Barry B. Burr

Officials of Exxon Co. USA and the National Automated Clearing House Association believe the new corporate trade exchange format and the corporate trade payment format now in use will exist side by side.

John W. Somers, banking analyst at the Houston-based unit of Exxon Corp. and Karen Reed, NACHA director of public relations, Washington, doubt CTX will replace the CTP for making corporate-to-corporate payments.

"It's not a case of one format being better than the other or replacing the other, but what is more suitable," Ms. Reed said.

CTP is a limited information format and is not capable of accepting payment data from the American National Standards Institute format, which was recently adopted as the industry standard to use to exchange ordering, invoicing and related information electronically.

CTX was recently adopted by NACHA to enable the ACH to process payments using the ANSI format.

The use of either format will depend on to what extent corporations want to integrate electronically their ordering, receiving and payment process, Mr. Somers and Ms. Reed said.

Corporations seeking to integrate the process would adopt the CTX.

General Motors Corp. is one of the leading companies working on such an integrated system with its vendors, but hasn't revealed any specifics on the type of electronic format it would employ.

"You will really need the integration of your purchasing, (materials) receiving systems and accounting system, if you are going to fully optimize the use of the CTX," Mr. Somers said.

The Federal Reserve will start adopting CTX capability in 1987 at its ACH transactions processing centers.

Ms. Reed said NACHA expects all Fed centers to have the capability of processing CTX transactions by mid-1987.

"There are common misperceptions about the CTX and the CTP formats," said Mr. Somers.

CTX wasn't designed to replace CTP, but to provide more sophisticated processing capability for corporations trying to automate fully their ordering, receiving and payment systems.

"I don't think CTX will diminish CTP," Ms. Reed added.

Ms. Reed said NACHA has no estimate on projected use of the CTX format to further the goal of having more corporate-to-corporate payments made through the ACH system.

CTP was adopted in 1984 to provide the first such corporate payment format.

Mr. Somers added, "I don't think NACHA is in a position to gauge corporate intentions."

Exxon is one of the few firms that regularly uses the ACH system. Mr. Somers, who declined to provide any volume information, said Exxon will continue to use CTP.

"Exxon has been an aggressive user of ACH (under the CTP format) where it makes sense in our businesses," Mr. Somers said.

"I would say it's an effective tool for us," he said of the CTP. He pointed out in part that it has reduced Exxon's transaction costs over checks.

As for the CTX, he said Exxon was familiar with the concepts but wasn't now considering its implementation.

"We would have no reluctance to use it once we are in a position to utilize it," he said.

He pointed out Exxon, unlike manufacturing companies that deal with thousands of suppliers, hasn't had the pressing need to integrate its ordering, receiving and accounting systems to control

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High bank fees . . .

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ou were working on and helped ou overall in your strategy to get vhere you were going, not the ransaction-oriented type deals, vhich is what this fee system has reated," she said.

Dillon, Read & Co. has shown ts willingness to work with DiGiorgio — a food processing, uilding material and land devel- pment company — in the tradi- ional way, Ms. Timmerman said.

"I would say that relationships re still very important," said Martin C. Murrer, an investment anker at Salomon Brothers Inc., New York. Long-term relation- hips help investment bankers nderstand the needs of their cli- nts, he said.

"I would say if there is a lack or eterioration of relationships, it's principally a policy matter done by the corporation, certainly not something advocated by investment banks," said Mr. Murrer, a vice president in Salomon's corporate finance department.

Peter J. Aranow, a managing director at Bear, Stearns & Co., New York, also said the shift from relationship-oriented banking is a result of choices made by corporations. The search for the lowest bid undermines traditional relationships, he said.

Some corporate executives worry large fees are weakening the "whole traditional relationship," Mr. Aranow said. "I wouldn't say that they are, but certainly they are affecting a portion of investment banking, Wall Street being an economic animal."

The largest corporations, on average, paid out $2.6 million in investment banking fees in the 12 months through June, according to preliminary data of an investment banking study released by Greenwich Associates, Greenwich, Conn. Twenty-seven percent of large industrial companies spent more than $5 million.

The study noted 62% of the amount typically is paid to a company's most important investment banker, while 35% on average was paid to its second most important banker.

While many corporate executives expressed their concerns, some framed their comments in a context that was sympathetic to the bankers.

Robert Ryan, treasurer at McDonald's Corp., Oak Brook, Ill., said fees are always a concern for the company, a frequent issuer in the domestic and foreign markets. Generally, however, "I don't think they have been too high," given the services McDonald's receives, Mr. Ryan said. "Investment bankers know what we're looking for. They've come up with some outstanding ideas for us."

"We feel that the fees are certainly adequate, but we do not feel we are being gouged," said Richard B. Klein, treasurer at the Corning Glass Works, Corning, N.Y. Underwriting fees cover services that investment bankers perform throughout the year, he noted.

"For example, now we're getting information from them in trying to pick our timing to issue. You don't get charged for that per se, that's all part of the package," Mr. Klein said.

"While the fees vary over a pretty good range of amounts, it's hard to make an argument that in general they are too high," said Richard J. Osborne, treasurer at Duke Power Co., Charlotte, N.C.

"I guess it's one of those things where you'd always like them lower," said A.J. Carter, assistant treasurer at Piedmont Aviation Inc., Winston-Salem, N.C. "But I certainly think we're paying at the market or slightly below it for most of our investment banking services."

At Gannett Co., Arlington, Va., Assistant Treasurer Vaughan C. Clarke said investment bankers sometimes work with thin profit margins. He cited the 17-basis-point spread between Treasuries and a recent Gannett debt issue managed by Dean Witter Reynolds Inc., New York.

"So as you can see, however you want to split that profit, there isn't a hell of a lot for credit risk and there isn't a lot for the investment banker's profit," Mr. Clarke said.

But corporations in general pay too much to investment bankers, he said.

Trading losses resulting from bad interest rate bets in the past few months discourage investment banks from reducing their fees, Mr. Clarke said.

"If you have high retail demand and don't have very much inventory and if interest rates are going in the right direction, then you can afford to be aggressive in your bid, which means that you can narrow your spread or narrow the profit you can take out of a transaction," he said.

Few corporate executives see any alternative to the underwriting services performed by investment bankers.

The breakdown of traditional relationships and the rise of an intensely competitive environment has come since the institution of shelf registration in 1982.

Although investment bankers feared at the time that the ease with which companies could now issue securities would lead issuers to sell their securities on their own, such a trend has yet to materialize.

What has kept the ties to investment bankers strong is the increased complexity of the capital markets and the proliferation of creative, highly technical financing ideas. Corporate executives also point to Wall Street's knowledge of what investors will buy and at what price as the key reason they continue to look to investment bankers for service.

"Even if a company has the internal expertise, they don't have the feel of the market," said Garland Asher, director of financial planning at Tandy Corp., Fort Worth, Texas.

He cited his company's efforts to raise $150 million of two- and four-year notes in 1984. "Salomon Brothers identified a window of opportunity for us as the year ended and wound up saving us 43 basis points over the T-bill rate on the two-year notes," he said. "We simply couldn't have done that on our own."

"I'm not sure that direct entry into the public markets would be good for us because a major advantage of a major investment bank is their marketing ability, their ability to maintain investor interest in a company," said John H. Flittie, senior vice president and chief financial officer at Northwestern National Life Insurance Co., Minneapolis.

"We can't replicate what the big guys offer in that regard.

"A company like ours is not in the capital markets enough to have the expertise to do that. We've had two public offering in 101 years. You just can't accumulate and maintain the expertise on something you may do twice in your career."

Some corporations, however, are scrutinizing what type of investment banking services they will use, sometimes opting to bypass Wall Street.

Exxon Corp., New York, for example, will sell its new issues

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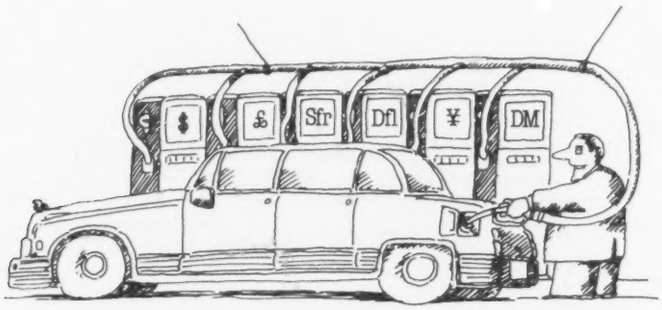

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irectly to investors without the id of underwriters, a stance reating anxiety on Wall Street.

The oil company already has sold veral issues via a Dutch auction, or vestor bidding process, the last of hich was a $1.8 billion (face value) ero-coupon deal sold in the Euro-ean marketplace.

Exxon would not hesitate to sell irectly into the market in the ture if a financing suited that oute, said Allen Harrison, assis-nt treasurer.

The company's efforts stemmed part from a desire to curb vestment banking fees and other nderwriting costs. "We also anted to see more competition in e market," Mr. Harrison said.

He noted, however, that Exxon's bility to do direct offerings stems om its unusual position among corporations.

"We have a much larger finance staff than most other corporations. Our name sells well and we don't go into the market very often," Mr. Harrison said.

Other companies that aren't in a position to do direct offerings have turned to competitive bidding as a means of cutting fees to investment bankers.

United Telecommunications Inc., Westwood, Kan., has saved at least 20 basis points on deals it has done on a competitive rather than negotiated basis, estimated Donald Coyne, director of long-term financing.

The high fees in the merger area are prompting some companies to cut back on investment banking services to those it deems necessary on a case-by-case basis.

One acquisition-minded corporate official has used investment bankers to generate fairness opinions but not broad advisory work.

Even then, he said, his company shopped around, in one case bypassing the majors to hire a firm that provided quality service at a more reasonable fee.

Hospital Corp. of America, Nashville, Tenn., meanwhile, has been willing to eschew investment bankers if its merger activity doesn't warrant it. "We acquired Hospital Affiliates from INA Corp. in 1981 without the help of an investment banker," said William McInnis, vice president-finance. "Maybe it was a little bit of a macho thing. But we had agreed on what we thought was a fair price. At that point it became a legal thing."

While corporate officials are displaying growing alarm at the high cost of mergers and acquisitions advice, the largest corporations do not consider those fees the most important factor in hiring an investment banker.

"A merger is the largest volume and most important transaction that a corporation will undertake," said Jay Bennett, associate at Greenwich Associates. The consulting firm's study, he said, is finding that such factors as expertise, working relationships and the ability to do the deal will rank before fees in terms of how officials value their investment banker's service, he said.

At Chrysler Corp., Detroit, the focus in acquisition, as well as other investment banking services, is whether the company is getting good value for its money, said Fred Zuckerman, treasurer.

On a $1 billion acquisition, Chrysler probably would pay about $10 million in mergers and acquisitions advisory fees, he theorized.

Because of its focus on quality of service, Chrysler never discusses fees up front. "That comes up only after we've looked at the value added," Mr. Zuckerman said. ■

Notes . . .

Continued from page 43

a "modest" portion of that to investors in securities with shorter maturities typically seen in the U.S. arena, said Don Van Deveter, senior vice president at First Interstate.

The shelf documentation provides language for issuing notes up to 15 years in registered form and with semi-annual interest payment dates, for the U.S. market, and in bearer form with annual interest payment dates, for the Euromarkets.

The liquidity of the securities is enhanced in that the facility also allows for notes, once trading in the secondary markets, to transfer from a bearer to registered form on a one-time basis so those securities could be sold in the U.S. marketplace, said Mr. Boldon.

Officials at Ford Motor Credit, however, see the one-time transfer from bearer to registered form as only a short-term solution to liquidity concerns.

"Long term it's not going to solve the problem," said Marvin Runyon, supervisor of fund operations administration at Ford Motor Credit.

The issuer is looking for alternative solutions to the liquidity issue and other hurdles before it moves to establish an overseas facility.

Other medium-term note issuers, meanwhile, are watching the development of the fledgling overseas market. While they foresee entering that market down the line, they see little incentive to be among the first at bat.

"Medium-term notes had been a GMAC and Ford Credit market until very recently so you would expect them to go into the Euromarkets with programs first as well," said one treasurer, whose company established its first facility domestically last fall. "For the smaller issuers of medium-term notes, it will take longer to develop."

"A global program is certainly a logical next step," said Richard Terzian, senior vice president and treasurer at Great Western Financial Corp., Beverly Hills, Calif. "After we see how that market develops, we would be very anxious to look at a global program."

Chrysler Financial Corp., Detroit, has amended its existing medium-term note documentation to accommodate a global program should officials there decide to enter that market.

However, in a developing market, Timothy Dykstra, assistant treasurer at Chrysler Financial, sees greater benefits in letting others lay the groundwork.

"We're in a wait-and-see mode," said Mr. Dykstra.

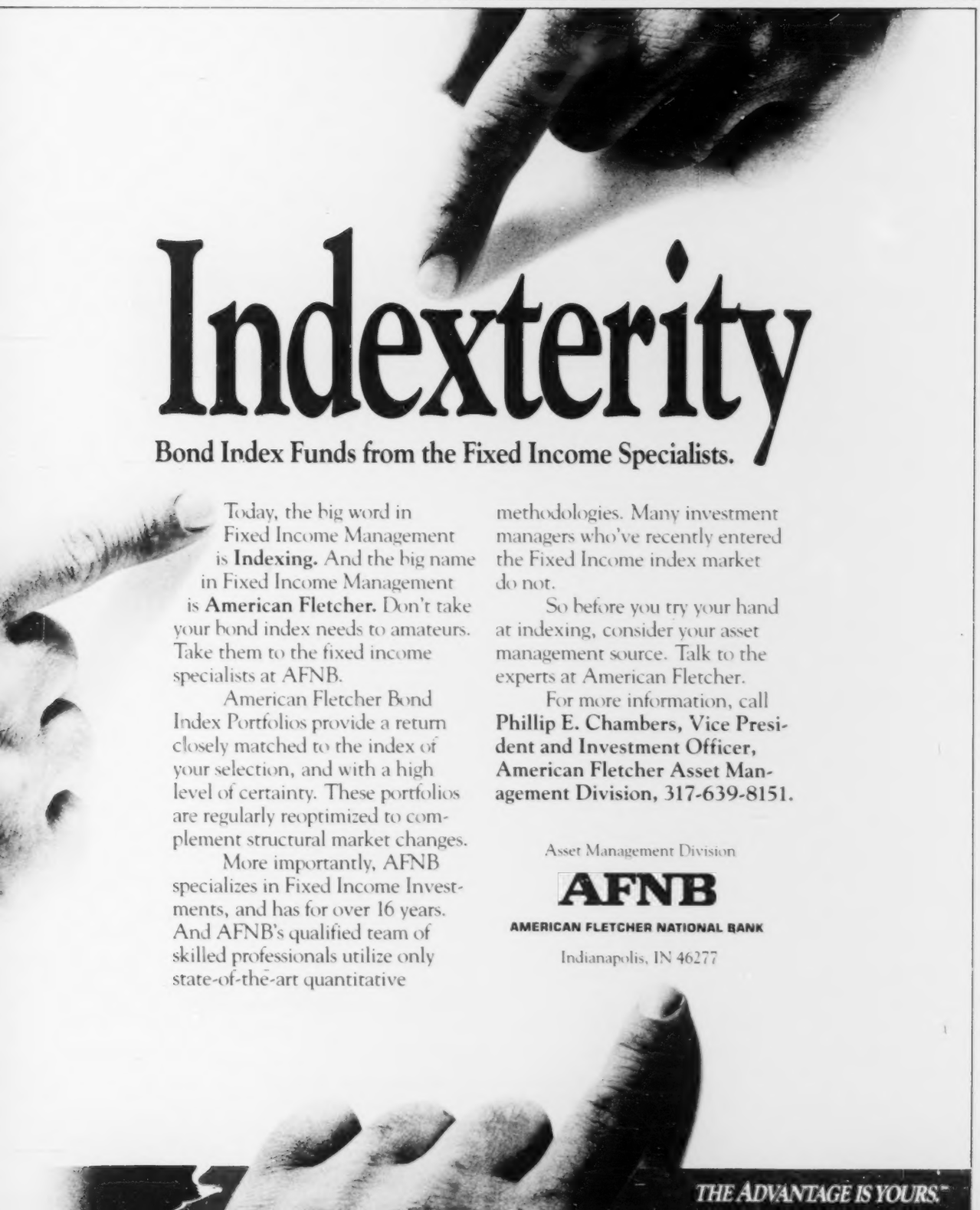
Household Finance Corp., Prospect Heights, Ill., is watching the development of the overseas market as well, but won't seriously consider extending its medium-term note program overseas until 1987, said Greg Pearsen, assistant vice president.

"At that time we'll take a look at how the market has developed and the degree of investor demand before launching a facility."

HFC is looking to the non-U.S. programs as complements to recently established Eurocommercial paper facilities.

Indeed, issuers and investment bankers say the increasing activity in the emerging market for Eurocommercial paper should go a long way in educating overseas investors on the attributes of securities issued through continuously offered facilities.

GMAC's Mr. Van Orman said its Eurocommercial paper activities are aiding the issuer in its efforts to structure a non-U.S. medium-term note program as well. "We've gotten some good experience in the last three months through our Eurocommercial paper program," he said. ■



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Pensions & Investment Age

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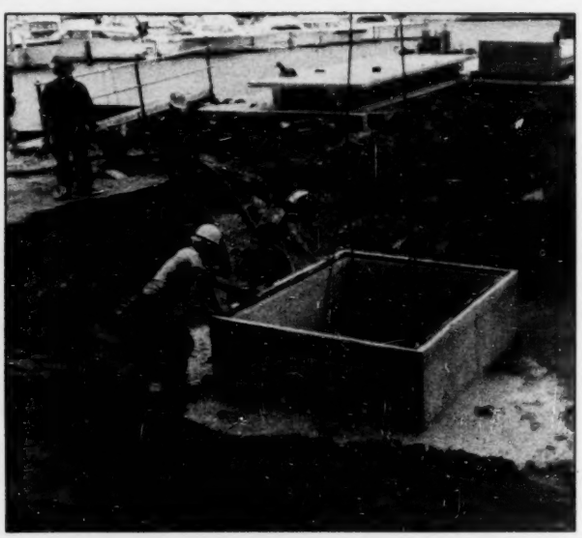
Inside:

CORPORATE FINANCE: Angell Care Inc., a nursing home operator in Advance, N.C., is financing the purchase of 65 nursing homes through a master limited partnership that keeps the debt off Angell's balance sheet — page 27.

By Sherrie Nickol, Crain's N.Y. Business

James Ward and Leonard Wissner, shown here, are targeting small banks as clients for Ward & Wissner Capital Management's new options and futures techniques — page 58.

CASH MANAGEMENT: Mobil Oil Co., which already has the largest debit-card network, is expanding it. But the Arizona Clearinghouse Association is expanding its ACH-based debit-card system, too, which is now being used as a pilot program for some companies — page 53.



UNION FUNDS: Plumbers Local Union 93, which covers the plumbers, shown above, setting this pre-cast vault for a project in Waukegan, Ill., is bucking national union standards by, among other things, freezing its defined benefit plan and putting in its place a defined contribution plan — page 19.

FUTURES & OPTIONS: Some tax-exempt pension funds ... eliminating their options overwriting ... ers, ... nue to ... with

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$215 million contribution

LTV seeks fund waiver

By Rose Darby

DALLAS — Officials of The LTV Corp., which filed for Chapter 11 bankruptcy in mid-July, is asking the Internal Revenue Service for a waiver to defer payment of $215 million in pension fund contributions for 1985.

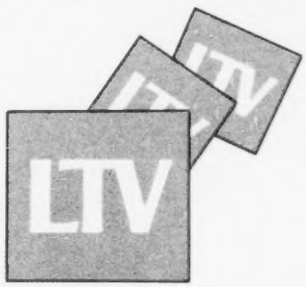
This is the second waiver LTV has sought. Last year, it was granted a collateralized waiver for $175 million in 1984 pension contributions.

Charles M. Palmer, LTV's spokesman, said the new waiver covers contributions due Sept. 15 for 12 steel and energy pension funds.

In addition, he said company officials are fairly certain they will be able to fund the estimated $2 million September benefit payment for the almost $3 billion Republic Steel Co. salaried workers plan. Shortly after the company filed for protection from creditors under Chapter 11 of the federal Bankruptcy Code, officials announced they expected that plan to be terminated. That plan is among the 12 for which LTV is seeking a funding waiver.

Company officials had said the Chapter 11 filing was necessary in part because the $375 million pension contribution for all of LTV's pension and retiree benefit plans could not be met along with servicing its $1.7 billion in debt.

There are 25 pension plans. Mr. Palmer said the $375 million contribution includes funding of



health and life insurance benefits.

"There was a growing pension burden from all of the pension plans," he said. "We currently have two retirees for every active worker in our steel business."

The Republic Steel salaried workers plan had been depleted considerably from lump-sum payouts, and funding has been by monthly cash infusion since Republic's acquisition by LTV in June 1984, he said.

The recurring monthly obligation for the salaried plan was $2 million; any lump sums were in addition to that.

Unfunded liabilities for that Republic Steel plan range as high as $400 million, depending on which actuarial calculations are used, Mr. Palmer said.

The company has no plans to terminate any other pension plans, he said.

The other steel plans for which waivers are sought are: the $300 million Jones & Laughlin Steel Inc. salaried employees plan, Cleveland; the $485 million Jones & Laughlin Steel hourly employees plan, Cleveland; the $626 million Republic Steel Corp. plan for hourly workers, Cleveland; the $1 million Kensington Steel Corp. fund, Cleveland; and three other small plans.

Waivers also will be sought for four energy company pension funds, with combined assets of about $28 million: Continental Emsco pension fund, Evansville, Ill.; LTV Energy Products Retirement Plan, Dallas; Continental Emsco pension fund, Garland, Texas; and Continental Emsco pension fund, Houston.

LTV's aerospace and defense

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Funds paying twice for investing cash

By Barry B. Burr

WASHINGTON — Some trust departments that invest idle cash balances in sweep accounts for employee benefit plans may be double charging for assets under management and could be violating prohibited transaction provisions of ERISA.

Pension executives often pay a double fee for the management of temporary short-term investments. In interviews, some executives said they were cognizant of the double charges, but others said the double charge was an expense they hadn't fully comprehended.

In an information letter on the double charge, the Labor Department singled out as a violation only the practice of any bank serving as investment manager that also has a standing, discretionary arrangement to sweep idle cash balances into the bank's short-term investment fund.

In other cases, where a separate money manager has discretion over the asset allocation and the amount placed temporarily in a bank's short-term investment fund, the Labor Department sanctioned the arrangement, even though it would result in the double charge.

A number of pension executives, including officials of Allied-Signal Inc., Morristown, N.J., and Manville Corp., Denver, suggested the costs of such allowable double charges have been overlooked and should be scrutinized.

The Labor Department issued the information letter in response to a request from the Federal Reserve System's board of governors and the office of the comptroller of currency.

According to the letter, violation of the Employee Retirement Income Security Act of 1974 may arise when a trust department "has an interest in the transaction which may affect the exercise of its best judgment as a fiduciary" to an employee benefit plan. Such discretion would come when a bank also was an investment manager for a plan.

"For this service, the bank will charge the plan a fee calculated as a percentage of the daily invested cash balance in the money market fund," the Labor Department letter notes.

"In effect, the bank would be using its fiduciary authority to cause the plan to pay an additional fee for a service performed by the bank in violation of section 406(b)(1) of ERISA.

"Although there would be initial approval of the arrangement by the plan, thereafter the bank would have total discretion to

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Oil company tries to save debt swap

By Brad Rudin

OKLAHOMA CITY, Okla. — Torpedoed by the slump in oil prices and struggling to keep afloat, Texas International Co. has had to sweeten a proposed debt exchange after investors reacted coolly to the offering.

Corporate finance

If the company's new offer meets a favorable response among the bondholders, the oil exploration company will enjoy a reprieve that could pave the way for prosperous days, some analysts say.

But the restructuring of $261 million in long-term debt is just one factor among several that will determine the company's future, the analysts say.

Negative stockholders' equity and its net loss history caused the New York Stock Exchange to suspend trading in Texas International stock July 31 (the stock is now traded on the Pacific Stock Exchange). Moody's Investors Service, New York, gives the company's subordinated debt a Caa rating, while Standard & Poor's Corp. assigns these securities a

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11 Putnam staffers quit

International team launches own investment firm

By Rose Darby

BOSTON — Virtually the entire investment management team at Putnam International Advisors Inc. defected last week to form a new firm, dealing a severe blow to The Putnam Advisory Co. and its parent, Marsh & McLennan Inc.

The 11 members of the investment management team who left, including most of Putnam's Tokyo and London offices, formed an independent international investment firm in which they will have an equity stake.

The inability of key investment officials to secure an equity share at Putnam International prompted their decision to leave, sources said.

Putnam International had about $1.4 billion under management as of March 31 in 38 accounts for pension funds clients, according to *Pensions & Investment Age*'s Aug. 18 directory of international advisers.

Walter Oechsle, former president and chief investment officer of Putnam International, will be managing general partner of Oechsle International Advisors. The firm is based in Boston, with offices in London and Tokyo.

Mr. Oechsle had been with Putnam for 13 years.

The departed employees did not constitute the entire international department at Putnam, said Charles O'Neill, senior vice president of Putnam.

Officials at the Houston Police Officers' Pension Fund said they received word last week that Putnam International, which had been a finalist in the fund's recent international search, dropped out because it won't have an international product until the departing staff members are replaced.

Other employees who left Putnam are: Sean Roche, senior portfolio manager for international equities, who will be a general partner at the new firm; Steve Langer, international product manager, who will be a general partner; and Warren Walker and Stavros Iatridis, two international equity analysts, who will be research analysts at the new firm.

Dee Keesler, director of European research in Putnam's London office, will be a general partner in Oechsle's London office; Steven Schaefer, managing director and senior portfolio manager in London will be a general partner and head of Oechsle's London operation; Tetsuo Shiozumi, who headed Putnam's Tokyo office, will be a general partner and head of Oechsle's Tokyo office; Noboru Terashima, international equity analyst in Tokyo will be a research analyst in Tokyo for Oechsle; Elisabeth Davies, administrative assistant, will be manager of operations for Oechsle in Boston; and Terese Franklin, marketing associate, will continue in that capacity for Oechsle.

In London, the only remaining Putnam employee is John Storkerson, European marketing director.

Putnam's Mr. O'Neill said Francis H.M. Kelly, who joined Putnam Advisory in July as head of domestic equity management, will assume Mr. Oechsle's position.

Robert Nuboer, senior inter-

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California charts divestiture course

By Trudy Ring

SACRAMENTO, Calif. — The California state pension funds' divestiture of South Africa-related securities — the largest such action ever — may set a precedent for other public funds.

Under new legislation, the $37 billion California Public Employees' Retirement System and the more than $18 billion California State Teachers' Retirement System will divest about 18.5% of their assets. Divestiture is scheduled to begin Jan. 1, 1988, and be completed Jan. 1, 1991, with one-third of the securities to be divested each year. New investments in companies operating in South Africa will be prohibited as of Jan. 1, 1987.

"I suspect it's going to encourage other government funds to step over the fence that they may have been straddling," said Brian Rom, president of the consulting firm Brian Rom Co., New York. Both houses of the California Legislature passed the divestiture bill in late August, and Gov. George Deukmejian was expected to sign it shortly.

"The move was encouraged by a lot of the public fund divestiture we have seen, and I think it will encourage even more," said Rob Jones, projects director for the American Committee on Africa, a pro-divestiture lobbying group based in New York.

The California decision is important both because of its size and because of its endorsement by a Republican governor, Mr. Jones said. It dwarfs what had been the largest divestiture action, the $12.5 billion New Jersey Division of Investment's sale of about $3 billion worth of securities over three years, beginning a year ago.

"We consider it to be a tremendous victory for the divestment movement in this country," Mr. Jones added. "We feel it points up how out of line the (Reagan) administration is on South Africa."

Staffs of the systems are working to determine the costs of divestiture. "Clearly, there are costs, but we don't know what they are," said Greta Marshall, chief investment officer of the public employees' system. The fund has at least $6 billion in stocks and bonds of companies doing business in South Africa, Ms. Marshall said.

The teachers' retirement system has about $4.2 billion in these securities, said Larry Kurmel, chief executive officer.

Costs of divestiture will include brokerage fees and market impact, Ms. Marshall said.

Mr. Rom said that despite the size of the California divestiture, impact on stock prices likely will be negligible.

Published figures on the public employees' system's holdings of several South Africa-related stocks, including **Exxon Corp., Merck & Co., E.I. du Pont de Nemours & Co.** and **American International Group**, indicate the amount held of each stock is a fraction of the security's one-day trading volume, Mr. Rom said.

"With program and package trading that is being offered by the big brokerage firms, anything that is under 100% of one day's trading can be handled routinely," he said. "Certainly, from a trading point of view, it's not an issue for these highly liquid stocks."

Also divesting will be the University of California pension and endowment funds, which have about $3.1 billion, or 38% of their $8 billion total assets, in South Africa-related securities, said Patricia Small, associate treasurer of the university.

The university, based in Berkeley, receives a state contribution but invests autonomously. Trustees of the pension and endowment funds approved divestiture a month ago (*Pensions & Investment Age*, Aug. 4). However, they declined to begin sales until the state indemnified them so they could not be held liable for losses to the fund that might result from divestiture. This legislation did so, and also indemnified trustees' of the public employees' and teachers' retirement systems.

Ms. Small said the amount to be divested by the university could exceed $3.1 billion somewhat, as the market value of its securities has increased since those numbers were computed in March. Also, the university's divestiture program could affect a portion of its $1 billion in short-term investments, she said.

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Bill overhauls benefit plans

By Richard J. Gillespie

WASHINGTON — The 1986 tax bill will cause radical changes in the way retirement plans are operated, overhauling vesting, integration and coverage rules while paring the advantages of tax-deferred savings plans.

But the new rules, designed to enhance benefits coverage and income for the rank and file, also may drive large employers to use unfunded vehicles to boost benefits for executives while discouraging smaller employers from adopting retirement plans, pension experts said.

In any event, the legislation, which awaits final approval by Congress upon its return this month, will escalate administrative costs for employers.

"I think you could rightfully say this is the biggest piece of employee benefit legislation since the Employee Retirement Income Security Act passed (in 1974)," said Edward J. Davey, vice president and manager of the research department at Johnson & Higgins in New York.

Elsewhere, the alternative minimum tax proposal that analysts feared might effectively make pension fund contributions taxable for the first time was altered to skirt the problem.

Instead of making a taxable "preference item" of the difference between book income and reported income, the bill substitutes a new "alternative minimum taxable income," thus sidestepping the problem, said David Burton, manager of the tax policy center at the U.S. Chamber of Commerce.

The problem arose because the Financial Accounting Standards Board's Statement 87 could cause pension expense in reported income to differ from book income. That might boost pre-tax earnings in calculating the discarded version of the alternative minimum tax (*Pensions & Investment Age*, July 21).

The tax bill will cause changes in virtually every retirement plan in the country.

In particular, actuaries say the vesting, integration and non-discrimination provisions in the bill will provide a heavy new work-

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Maryland unions threaten to pull assets from banks

By Trudy Ring

BALTIMORE — Organized labor leaders in Maryland are threatening to withdraw union pension assets from banks that belong to a business group that released a report criticizing the state Legislature's record on business issues.

The group, Maryland Business for Responsive Government, Baltimore, released the report in April. It evaluates the voting records of the Maryland General Assembly's 188 members on what the group contends are issues relevant to the state's business climate.

But the Maryland State and District of Columbia AFL-CIO, Annapolis, contends many of the issues on which the legislators were rated are irrelevant and have less to do with being pro-business than being anti-labor.

Maryland Business for Responsive Government has 19 member ters or substantial operations in Maryland. Six of the companies are banks or bank holding companies — Equitable Bancorp., First Maryland Bancorp., Maryland National Corp., Mercantile Safe Deposit and Trust Co., Union Trust Bancorp. and Sovran Bank Maryland. All are based in Baltimore.

Ed Lamon, president of the state AFL-CIO, said labor leaders recognize the banks' right to belong to the group, but believe if the group has an anti-labor focus, unions should not keep money in those banks belonging to it.

"We're just saying that we do not want our dollars used against us," he said.

AFL-CIO leaders are meeting with bank officials, asking that the banks either resign from the group or work to change its focus, Mr. Lamon said. Otherwise, he said, unions might withdraw pension and operating money man-

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Opinion

Corporations: Watch your step

ALMOST IMPERCEPTIBLY, corporations are slipping into a financial morass from which they might not be able to easily extricate themselves. Their slide is being hastened by their best instincts.

The morass is the financing of post-retirement health-care benefits for employees.

Many large companies provide such benefits. Some of these benefits were won by unions in contract negotiations. Others were provided by companies simply because they believed it was right to help their retirees in this way.

However, few companies have begun to prefund the costs of these benefits. Most are paying them on a pay-as-you-go basis.

Already the Department of Labor estimates the liabilities for such benefits total more than $100 billion. In 1983, the estimate was $98 billion.

Some companies do not consider these costs true liabilities, because they believe they can terminate the benefits at any time for former salaried employees, and when a contract expires for union employees. But recent court decisions leave the matter unclear.

And the Financial Accounting Standards Board has opened formal discussion on whether these are liabilities in an accounting sense, and whether these costs should be disclosed in corporations' financial statements.

Now the tax reform act has complicated any thoughts of pre-funding such benefits.

Corporations would be well advised to examine what they have promised to employees and former employees in the manner of post-retirement health benefits, and to discuss with their lawyers the legal status of such promises.

They should also plan, if they decide to continue such benefits, how best to pre-fund the liabilities, which are likely to grow dramatically as the work force ages.

Time to simplify pension reporting

NOW THAT TAX simplification has been agreed upon by the Senate and House of Representatives conference committee, let's push ahead with pension fund reporting simplification.

Corporate pension fund executives are burdened with complex reporting requirements that seem to make little sense.

Form 5500, for example, is long, detailed, complicated and apparently of little use to anyone.

Surely this form at least could be simplified and abbreviated in the light of many years of experience. The Department of Labor and the Internal Revenue Service must know which parts of the 5500 really are useful to them in enforcing the Employee Retirement Income Security Act. Preserve those parts and dispense with the rest.

Simplifying the reporting requirements would reduce the incentive for companies, especially smaller ones, to drop their defined benefit plans in favor of defined contribution plans, which have simpler reporting requirements.

The onerous reporting requirements are among the most common complaints about defined benefit plans by their sponsors.

Congress could encourage a group of private pension experts, under the watchful eyes of the IRS and the Labor Department, to study the problem and recommend simpler reporting requirements.

Letters to the editor

Lynch & Mayer

To the Editor: Lynch & Mayer Inc. was not included in the May 19 special profile issue of money managers.

The firm is at 650 Fifth Ave., New York, N.Y. 10019; (212) 246-7760.

We had $719 million under management as of Jan. 1, of which $550 million was tax-exempt.

The equity manager is a stock picker, focusing on companies with a positive fundamental change and the potential for a 50% price appreciation in its stock during an 18-month time horizon.

The asset mix as of Jan. 1 was 85% stocks and 15% cash. There were 19 tax-exempt clients. Minimum account size for separate management is $20 million.

There are three portfolio managers and four research staff members. We follow 250 stocks closely and 1,000, generally. Sixty percent of the research is generated internally.

Clients include Advanced Micro Devices, J.P. Stevens, Morton Thiokol and CPC International.

The firm is a wholly owned subsidiary of Lincoln National Corp.

Eldon C. Mayer, president, is chief investment officer. Client contact is Beth Geraghty, vice president-client service and marketing.

Beth Geraghty
Vice president
Lynch & Mayer Inc.
New York

Cabanne Smith

To the Editor: We obviously did not meet your deadline for the May 1986 issue of *Pensions & Investment Age*, but I am sending you this material for your files.

Cabanne Smith Associates, 101 Bryn Mawr Ave., Bryn Mawr, Pa. 19010; (215) 525-8350.

Cabanne Smith, an equity manager, had $60 million in total assets under management as of Jan. 1, 1986. Of that, $52 million was tax-exempt.

An equity manager, Cabanne Smith emphasizes emerging growth, low p/e, sector rotation and Graham & Dodd in its investment approach. The primary focus is on out-of-favor stocks with low p/e and strong underlying fundamentals. Managers also stress emerging growth stocks.

The tax-exempt asset mix as of Jan. 1 was 78% stocks, 18% cash and 4% convertibles.

There are four tax-exempt, corporate clients. Minimum account size for separate management is $500,000.

The firm had a $20 million net gain in new tax-exempt business.

There are two portfolio managers and one research staff member.

Managers follow 150 stocks closely and 300, generally; 70% of the research is generated internally.

Clients include AMP, Boeing and Fox Steel.

Chief investment officer and client contact is Cabanne Smith, president.

Bobbye Fritz
Cabanne Smith Associates
Bryn Mawr, Pa.

Information sought

To the Editor: Reference was made to *Pensions & Investment Age* in the January 1986 ABA Banking Journal article on banks as investment advisers:

". . . bank's share in pension management plummeted from 50% in 1975 to 38% in 1983, according to *P&I Age* magazine."

Would you have this statistic for more recent years or other references to banks as money managers for pension equity funds?

Gordon L. Ragan
Vice president
Hilliard Lyons Trust Co.
Louisville, Ky.

Editor's note: That information is in the mail to Mr. Ragan.

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CLASSIFIED PRODUCTION: Jackie Henderson (*Chicago*) 312/649-5280
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PUBLISHING DIRECTOR: Stephen D. Gilkenson

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Corporate Finance

Partnership keeps acquisition 'debt free'

By Brad Rudin

ADVANCE, N.C. — A master limited partnership formed by Angell Care Inc., a nursing home operator based here, will help finance the acquisition of 65 nursing homes in a deal that keeps debt off Angell's balance sheet.

Companies increasingly are interested in keeping plant-related debt off their balance sheets, said Thomas Weinberger, a managing director at L.F. Rothschild, Unterberg, Towbin Inc., the lead underwriter in the offering.

Although master limited partnerships have been used in the oil and gas industry, the Angell Care Master Limited Partnership is the first in the health care industry, Mr. Weinberger said.

This vehicle could be used to accommodate the financing needs of the health care industry, which is undergoing a period of consolidation.

Four limited partnerships, one for each state in which the nursing homes will be acquired, make up the partnership.

The partnership, whose only general partner is Angell Care Inc., proposes to acquire 3,823 nursing home beds in Florida, Illinois, Indiana and North Carolina by selling $16 units in the partnership. Application has been made to sell the units on the New York Stock Exchange.

The Angell Care Master Limited Partnership will raise $68 million for the acquisitions, according to the preliminary prospectus.

Limited partners initially will receive a minimum 9% annual return and could expect an annual return that approaches 11% during the 1990s, said Myron Neugeboren, a managing director at Rothschild.

(The increase in returns is due to the possible increase in rents on the nursing home leases.)

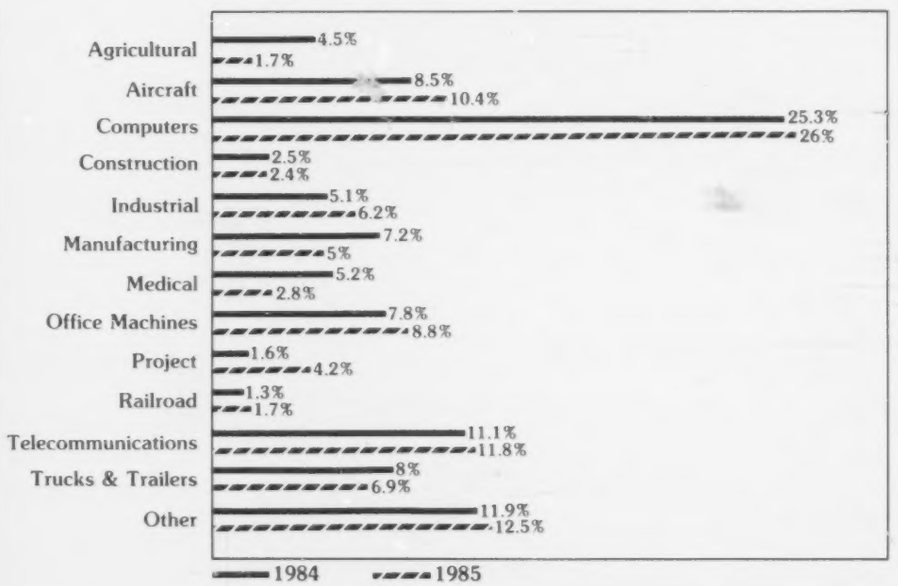
Examining the master limited partnership from the issuer's perspective, Mr. Neugeboren said Angell Care Inc. will benefit from management and acquisition fees provided by the master partnership agreement.

Angell Care, as the general partner, will

Continued on page 29

Total Leasing Volume

Percentage of Total Volume by Equipment Type



Source: American Association of Equipment Lessors, Arlington, Va.

Tax reform to change, not choke, lease arena

By Marci Baker

WASHINGTON — The tax bill recently approved by congressional conferees will shift the focus of activity in the leasing business, although few expect the tax rules to cause the business to shrink as a whole.

Eliminating the investment tax credit, lengthening the accelerated depreciation schedules and imposing an alternative minimum tax will take out some old players from the leasing business while drawing in some new participants.

Many believe the net impact will be continued — albeit less rapid — growth for the leasing market.

"I expect to see a general slowdown in the leasing business because there will be a slowdown in equipment acquisitions," said Michael Fleming, president of the American Association of Equipment Lessors, Washington. "But I don't look for an overall decline in leasing volume."

Lessors generated $24.4 billion in new equipment leasing business in 1985, according to a recent survey of 382 AAEL members. Survey respondents reported $14.8 billion in new business in the AAEL's 1984 poll.

The AAEL survey results are considered indicative of the industry, although the numbers represent only about 30% of the actual industry volume.

Another $3.2 billion in automotive and real estate leasing volume was recorded for the first time in the 1985 survey, reflecting the increasing activity in these segments of the leasing business.

Participants in equipment leasing say other motivations, such as off-balance sheet financing and convenience, will keep companies in the leasing arena. But players drawn in primarily to participate in tax-driven deals will, in all likelihood, sit on the sidelines in the future.

They could be replaced with companies that will find outright purchase of equipment less appetizing than in the past.

Major purchasers of equipment now may find leasing preferable

Continued on page 28

New issues of corporate securities

Aug. 4 — Aug. 15, 1986

Issue date	Company	Amount ($ mil.)	Type of security	Offering price Debt (%) Share ($)	Gross spread as % offer price	Where traded (to list)	Managers
Debt							
8/13	Imperial Savings Association	450.00	Mtg. Backed	100.00%	.675	OTC	Salomon/First Boston/Merrill Lynch/Morgan Stanley
8/13	GMAC	400.00	Notes	100.00%	.400	OTC	Merrill Lynch/First Boston/Morgan Stanley/Salomon
8/11	Pacific Bell	350.00	Debs.	95.63%	.915	OTC	First Boston/Goldman, Sachs/Merrill Lynch/Morgan Stanley/Salomon
8/13	CSX Corp.	300.00	Debs.	100.00%	.875	OTC	First Boston/Morgan Stanley/Salomon
8/11	Southeast Texas Housing Finance	300.00	Bonds	100.00%	1.000	OTC	DBL/HOWARD-WEIL/ROTAN*
8/8	Texaco Capital Inc.	300.00	Notes	99.75%	1.003	NY	Salomon/First Boston
8/7	Mesa Capital Corp.	300.00	Sub. Notes	Market	Market	NY	Drexel Burnham Lambert
8/15	Tele-Communications Inc.	250.00	Cvt. Sub. Deb.	100.00%	1.750	OTC	Drexel Burnham Lambert
8/14	General Dynamics Corp.	250.00	Debs.	96.30%	.909	NY	Salomon/Morgan Stanley/Lazard Freres
8/14	Citicorp	250.00	Sub. Notes	100.00%	.675	OTC	Salomon/Merrill Lynch
8/12	Amoco Co.	250.00	Notes	99.20%	.655	NY	Morgan Stanley
Common Stock							
8/14	Gabelli Equit, rust Inc.	400.00		$10.00	6.50	IPO (NY)	Shearson Lehman/Gabelli & Co.
8/12	American Television Comm.	268.30		$18.50	5.41	IPO	First Boston/Lazard Freres/Salomon/Shearson Lehman
8/13	The Banking Center	85.40		$12.63	6.18	IPO	Merrill Lynch/Salomon
8/15	Worcester County Institute for Savings	83.20		$12.75	6.04	IPO	PaineWebber/Merrill Lynch
8/13	Devon Group Inc.	45.00		$18.00	6 94	IPO	First Boston/Drexel Burnham Lambert/Dean Witter Reynolds
8/12	Seamen's Corp.	45.00		$9.00	6.78	IPO (AM)	Bear, Stearns/First Boston/Merrill Lynch
8/5	Diversified Energies Inc.	42.70		$24.38	4.27	NY	Kidder Peabody/Dain Bosworth
8/12	Adelphia Communications Corp.	35.60		$14.25	6.53	IPO	PaineWebber/Butcher & Singer
8/4	AAR Corp.	28.70		$21.25	4.75	NY	Goldman, Sachs/William Blair
8/6	Eastern Bancorp Inc.	26.90		$21.50	5.95	OTC	Dean Witter Reynolds/PaineWebber

Source: Securities Data Co., New York

**Drexel Burnham Lambert/Howard, Weil, Labouisse, Friedrichs/Rotan Mosle*
Mtg. backed: Mortgage backed bonds
Cvt. sub. deb.: Convertible subordinated debentures

NY: New York Stock Exchange
OTC: Over the Counter
IPO: Initial Public Offering
AM: American Stock Exchange

Corporate notes

Eye on Drexel deal

NEW YORK — Following the Goldman Sachs-Sumitomo Bank affiliation, many on Wall Street are now wondering how long before Drexel Burnham Lambert Inc. responds with a deal that will promise the firm a more predictable source of capital.

Goldman's decision to sell Sumitomo a 12.5% passive stake in return for $500 million of capital underlined the immense capital needs top firms on Wall Street face in the highly competitive environment.

The concensus appears to be that Drexel's place among the top-ranked investment banks won't be assured for the long term unless the firm first assures itself of a long-term source of capital.

The question to observers isn't whether the firm would respond, but how and when. But Wall Street appears more intrigued by the question than is Drexel.

"The fact is, we're not worried," said Fred Joseph, Drexel's chief executive officer.

Indeed, given the firm's growth, there's ample evidence to leave well enough alone. Drexel's latest capital tally stands at $1.5 billion; revenues this year look like they will be double those of 1985; and profits reportedly are running in front of most of its competitors. In addition, Drexel is clearly the hot place to work right now. As Mr. Joseph put it: "If it ain't broke, I'd be nuts to try and fix it."

While others agree there's little motivation for Drexel to respond immediately, they are less convinced leaving well enough alone is right for the long term.

Between other investment banks moving into the junk bond business and Drexel's efforts to diversify its investment banking activities, its fate as a major-league firm remains uncertain. In an increasingly worldwide competitive environment, observers argue the firms that will dominate in investment banking will be those with the strongest capital sources.

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New Issue / August 20, 1986

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Thomson McKinnon Securities Inc. — Tucker, Anthony & R. L. Day, Inc.

Note facility started

NEW YORK — In another development for the evolving medium-term note market, the New York branch of The Toronto Dominion Bank last month established a facility to raise up to $200 million in medium-term notes with one- to 10-year maturities.

Set up through Merrill Lynch Capital Markets, the continuously offered program is part of a larger one in which medium-term notes also can be issued occasionally in larger amounts on an underwritten basis, said Robert Whitelaw, managing director in Merrill's financial institutions department.

Mr. Whitelaw said the bank's move stems from a desire to find alternative financing sources and to reach the U.S. corporate bond market. Until now, foreign bank participation in the U.S. capital markets has been through CDs.

"The problem is that the Yankee CD market is not a terribly active market," Mr. Whitelaw said. The medium-term corporate debt market holds out much stronger prospects as a financing source.

Merrill Lynch is expecting the medium-term note structure will help make the foreign bank note market in the United States an important adjunct to other active capital markets in Europe and Japan for bank-related offerings.

It, as well as other investment banking firms, expects to see other foreign banks issuing similar notes through their U.S. branches (the notes are exempt from registration with the Securities and Exchange Commission through this route).

Mr. Whitelaw thinks increased demand by investors created by the recent jump in corporate bond yields will help fuel more activity.

Foreign banks with AA ratings or better will be the most likely institutions to step into the market. The Toronto Dominion notes carry long-term debt ratings of Aaa from Moody's Investors Service and AA+ from Standard & Poor's Corp.

More debt upgraded

NEW YORK — In a turnaround from first-quarter results, upgrades of corporate debt ratings outpaced downgrades by almost 20% during the second quarter.

According to Moody's Investors Investor Service, 66 ratings on $41.9 billion in corporate securities were upgraded in the second quarter, while 56 ratings on $33.5 billion in of debt were lowered.

In the first quarter, only 35 companies were upgraded affecting $19.9 billion of debt. At the same time, there were 75 downgrades affecting more than $63 billion of debt.

Moody's cited the decline in merger activity as one key reason for the turnaround. Also, most of the first round of oil price-related rating reviews were done in the first quarter.

Corporate restructurings sparked seven downgrades during the second quarter, among them the leveraged buy-outs of National Gypsum Co., GATX Corp. and R.H. Macy & Co. and the Burroughs-Sperry merger.

Second-quarter restructuring downgrades amounted to slightly more than half that of the first quarter — $7.5 billion of debt vs. $12 billion. In addition, Moody's reports these kinds of downgrades are lagging 1985's pace.

Oil-related downgrades affected 18 companies and $14 billion of securities, compared with 36 companies and almost $30 billion in the first quarter.

Meanwhile, the climb in rating upgrades stemmed largely from improvements in the utility as well as bank and finance sectors. Such factors as a supportive regulatory environment and effective cost-cutting measures fueled upgrades for 14 telephone companies and affected more than $18 billion of securities.

Tax reform to change . . .

Continued from page 27

to buying because they could be subject to the alternative minimum tax and won't be able to use depreciation to minimize that tax burden.

Mr. Fleming expects to see less growth in new leasing volume of aircraft, energy-generating facilities and other major-ticket items — the most tax sensitive of equipment leasing transactions — with imposition of new tax rules.

"The $1 million-and-up leasing transaction will be adversely affected by the bill. The $500,000 transaction will fare much better," Mr. Fleming said.

"There will be no impact on the high-tech stuff.

"By that I mean the growth of leasing in those areas will continue as before."

Computers, followed by telecommunications equipment, were the most active areas of equipment leasing in the 1985 AAEL survey.

Some 26%, or $6.34 billion, of the total 1985 new business represented computer leasing. Just under 12% or $2.88 billion, represented telecommunications.

Aircraft leasing rated third with 10.4% of new business volume of $24.4 billion. Office machines and trucks and trailers followed as the fourth and fifth largest equipment leasing categories.

Office machine equipment accounted for 8.8% of new business, while trucks and trailers accounted for 6.9% in 1985.

The market share of trucks and trailers represented a modest decline from the portion of new leasing business taken up by this category in 1984. Trucks and trailers took up 8% of the total in 1984.

Reflecting depressed performance in the agricultural and medical industries, declines in agricultural and medical leasing between 1984 and 1985 were more significant.

Agricultural leasing dropped to 1.7% of total new business volume in 1985, from 4.5% of volume in 1984. In the medical arena, leasing business dipped to 2.8% last year, from 5.8% in 1984.

In a breakdown by lease contract, almost $17 billion of the new business was added through direct finance leases, which among other things must carry lease terms equal to 75% or more of the property's estimated economic life. Computers, office machines and telecommunications equipment comprised 50% of the volume leased through these vehicles.

Leveraged lease transactions, which are heavily tax-driven and typically used for big-ticket items, accounted for $5.4 billion of new equipment leasing business in 1985.

Short-term operating leases generated the remaining $2.1 billion of new leasing business.

Under new tax rules, the direct finance and operating leases will dominate the scene, with the more tax-sensitive leveraged lease declining in use. ■

PIPER

The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by Pensions & Investment Age. *PIPER details comparative performance data on special equity and international funds at more than 50 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

In-house research generates top returns

By Chuck Paustian

Investment ideas generated outside of the major Wall Street research firms fueled the returns of the top-performing commingled special equity funds.

Executives for the $320 million intermediate-capitalization equities fund of Chase Manhattan Bank, New York, relied on research that is about 75% internal. That portfolio was the best-performing one for the quarter and the year ended June 30.

Chase's portfolio is managed by its investment management subsidiary, Chase Investors Management Corp.

Officials at the top funds in the other time periods of the Pensions and Investments' Performance Evaluation Report also researched the majority of their investment decisions in-house.

The median fund in the universe failed to outperform the Standard & Poor's 500 stock index in all but the 10-year period.

Neal Miller, vice president at Chase Investors, said the in-house research capabilities were the base for the fund's strong performance.

The fund had a return of 20.4% for the quarter ended June 30 and 70.3% for the one-year period.

"The overlying backdrop is we have a system in place so we can zero in and understand the investment changes in place," he said.

One of the best-performing stocks in the portfolio, **Fieldcrest Cannon Mills**, which benefited from the drop in cotton prices, was the product of the internal analysis process.

"In the case of Fieldcrest Cannon Mills, every 1-cent drop in the price of cotton results in $1.92 pre-tax on the bottom line," Mr. Miller said.

"One of the things that is the strength of this system is when you make a commitment and get aboard (a stock), you have a target price and certain assumptions."

When Mr. Miller bought Fieldcrest, it was selling at $32 per share. The stock now is selling around $80 per share.

The second best-performing fund in the quarter was the $16 million Growth Fund G of Security Pacific National Bank, Los Angeles, with a return of 19.5%.

William H. Duncan, managing director of Pacific Century Group, San Diego, a subsidiary of Security Pacific National, said about 75% of the investment ideas for the fund come from a network of small, regional brokerage firms.

"They're typically more idea shops and not full maintenance shops. Also, they're typically brokers I've worked with for several years," said Mr. Duncan.

"We take the ideas they present to us and check them against our criteria to see if we want to buy them."

Mr. Duncan said the firm's three criteria are rapid and accelerated earnings growth, companies with rising relative price strengths and companies in strong industries that are outperforming the market.

Mr. Duncan described the portfolio as "a diversified list of emerging growth companies."

Some of the better-performing stocks in the portfolio include **Rent-A-Center Inc.**, a chain of furniture and equipment rental stores; **Westwood One Inc.**, a packager of radio programs; and **New Jersey National Corp.**, a regional bank stock.

Following Chase and Security Pacific for the quarter ended June 30 was The Northern Trust Co., Chicago, 15.9%; The First National Bank of Neenah, Wis., (regional bank fund), 15.4%; and California First Bank, San Diego, 14.3%.

For the quarter ended June 30, the median fund had a return of 5.6% while the S&P 500 returned 5.9%.

The Chase Manhattan fund also was the best-performing fund for the one-year period with a return of 70.3%.

Chase was followed by First National Bank of Neenah (regional bank fund), 66.5%; Security Pacific, 59.2%; Fidelity Management Trust Co. (aggressive equity), Boston, 54.2%; and Equitable Bank, Baltimore, 49.6%.

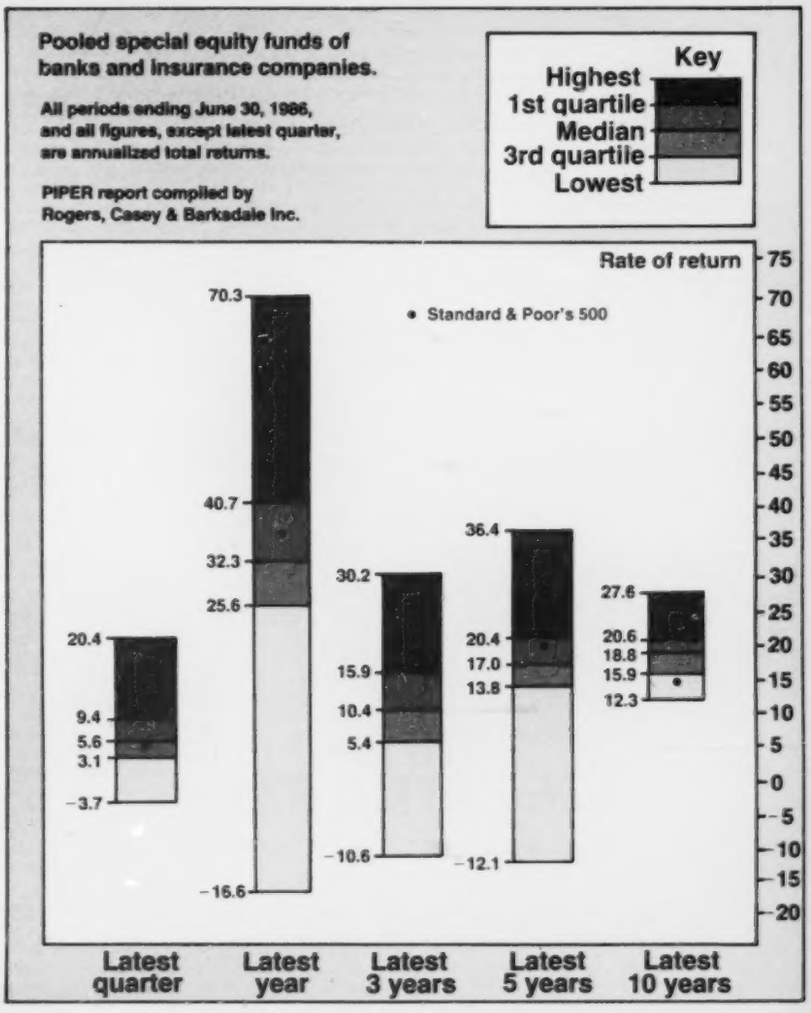
For the one-year period, the median fund had a return of 32.3% while the S&P 500

Continued on page 36

Pooled special equity funds of banks and insurance companies.

All periods ending June 30, 1986, and all figures, except latest quarter, are annualized total returns.

PIPER report compiled by Rogers, Casey & Barksdale Inc.



Funds do well with Japanese exposure

By Rose Darby

Avoiding export-related stocks and emphasizing domestic-sector stocks in the Japanese market helped many international money managers achieve strong performance in overseas investments for the quarter and the year ended June 30, Pensions & Investments' Performance Evaluation Report shows.

Not all 34 bank and insurance commingled funds in the PIPER international universe were overweighted in Japan during the first half of 1986, but those that deftly balanced a market weighting in Japan with good stock picking benefited there.

RepublicBank Dallas was the leader for the quarter ended June 30, with a total return of 16.7% on its $25 million equity fund managed by Baillie, Gifford & Co., Edinburgh, Scotland.

Baillie Gifford takes a long-term view, investing in small- to medium-growth companies. The firm is particularly committed to buying stocks in local, domestic companies, said Vida S. Icenogle, vice president and director of investment marketing with RepublicBank.

This investment strategy was particularly crucial in Japan, where local businesses market worldwide, she said. "Baillie Gifford has been capturing growth on the domestic side in Japan," Ms. Icenogle said.

Further, the fund benefited from the political structure put into place in France, where companies are in the process of being privatized on a grand scale, she said.

Wellington Management Co./ Thorndike, Doran, Paine & Lewis, Boston, was second for the quarter, with a total return of 16.2%.

U.S. Trust Co. of New York was third with a total return of 15.1%; CIGNA Corp., Hartford, Conn., was fourth, with 14.7%; and Aetna MIM Asset Management Ltd., Hartford, Conn., was fifth, with 13.5%.

The Morgan Stanley Europe Australia Far East Index gained 8.8% in U.S. dollar terms for the quarter.

For the one year ended June 30, BA Investment Management International Ltd., London, topped the charts, with a total return of 128.4% for its $53 million International Employee Benefit Equity fund.

John Horseman, investment manager, said BA Investment's positioning in the Japanese mar-

Continued on page 37

Commingled international funds

3-month returns

	%
Republic Natl. (stock), Dallas	16.7
Wellington Trust (pac. basin)	16.2
US Trust (eq.), N.Y.	15.1
CIGNA Corp. (eq.), Conn.	14.7
Aetna MIM (eq.), Conn.	13.5
Citicorp (eq.), N.Y.	12.2
IDS Trust (col. eq.), Minn.	11.2
Centerre Trust (col. W), Mo.	11.1
Bank of America (eq.), Calif.	11.0
Prudential (eq.), N.J.	10.9
Bankers Trust (eq.), N.Y.	10.6
Bessemer Trust (E), N.Y.	10.5
Chase Manhattan (eq.), N.Y.	10.3
Travelers Hill Samuel (W), Conn.	10.0
Marine Midland (eq.), N.Y.	9.9
Wellington Trust (stock), Mass.	9.7
First of Chicago (eq.)	9.4
California First Bank (eq.)	9.0
Bank of America (fix.), Calif.	8.9
EAFE	**8.8**
Morgan Guaranty (eq.), N.Y.	8.8
American National (eq.), Chicago	8.3
HT Investors (eq.), R.I.	8.2
Toledo Trust (global bond)	7.8
Prudential (for. bond), N.J.	7.1
Toledo Trust (eq.), Ohio	6.9
Morgan Guaranty (bond), N.J.	6.3
Prudential (global bond), N.J.	5.9
Fidelity Mgmt. Trust (eq.), Mass.	5.8
Wellington Trust (bond), Mass.	5.6
First of Chicago (non-dlr. fix.)	5.2
Mellon Bank (eq.), Pa.	5.0
Citicorp (fix.), N.Y.	4.9
Marsh & McLellan Trust, Mass.	3.1
First of Chicago (dlr. fix.)	3.0

1-year returns

	%
Bank of America (eq.), Calif.	128.4
Aetna MIM (eq.), Conn.	104.7
Bessemer Trust (E), N.Y.	104.6
Citicorp (eq.), N.Y.	102.3
Republic Natl. (stock), Dallas	99.4
Centerre Trust (col. W), Mo.	97.5
US Trust (eq.), N.Y.	94.2
IDS Trust (col. eq.), Minn.	93.2
Chase Manhattan (eq.), N.Y.	91.3
Morgan Guaranty (eq.), N.Y.	90.1
EAFE	**89.6**
Marine Midland (eq.), N.Y.	89.5
CIGNA Corp. (eq.), Conn.	88.0
Fidelity Mgmt. Trust (eq.), Mass.	87.4
First of Chicago (eq.)	86.6
Marsh & McLellan Trust, Mass.	86.6
Bankers Trust (eq.), N.Y.	86.2
American Natl. (eq.), Chicago	84.8
HT Investors (eq.), R.I.	84.2
Wellington Trust (pac. basin)	82.1
Wellington Trust (stock), Mass.	81.1
California First Bank (eq.)	80.9
Mellon Bank (eq.), Pa.	73.5
Toledo Trust (eq.), Ohio	69.4
Bank of America (fix.), Calif.	68.8
Travelers Hill Samuel (W), Conn.	64.5
Prudential (glob. bond), N.J.	58.3
Prudential (for. bond), N.J.	57.3
Citicorp (fix.), N.Y.	56.8
First of Chicago (non-dlr. fix.)	53.6
Toledo Trust (glob. bond)	49.5
Morgan Guaranty (bond), N.Y.	48.8
Wellington Trust (bond), Mass.	43.3
First of Chicago (dlr. fix.)	19.7

3-year returns

	%
Bank of America (eq.), Calif.	38.4
EAFE	**37.8**
Aetna MIM (eq.), Conn.	36.5
Bankers Trust (eq.), N.Y.	35.3
American Natl. (eq.), Chicago	35.1
Marsh & McLellan Trust, Mass.	35.0
IDS Trust (col. eq.), Minn.	33.9
Citicorp (eq.), N.Y.	33.3
Wellington Trust (pac. basin)	33.1
Marine Midland (eq.), N.Y.	32.9
First of Chicago (eq.)	32.3
US Trust (eq.), N.Y.	31.5
Wellington Trust (stk.), Mass.	31.4
Republic Natl. (stock), Dallas	31.0
Fidelity Mgmt. Trust (eq.), Mass.	29.8
Centerre Trust (col. W), Mo.	28.8
Bessemer Trust (E), N.Y.	27.8
Morgan Guaranty (eq.), N.Y.	27.5
Prudential (glob. bond), N.J.	26.7
Travelers Hill Samuel (W), Conn.	26.4
Mellon Bank (eq.), Pa.	25.1
Chase Manhattan (glob. eq.), N.Y.	23.1
HT Investors (eq.), R.I.	22.8
Bank of America (fixed), Calif.	21.9
Prudential (for. bond), N.J.	21.3
Morgan Guaranty (bond), N.Y.	19.5
First of Chicago (non-dlr. fix.)	19.1
Citicorp (fix.), N.Y.	18.7
First of Chicago (dlr. fix.)	17.3
Wellington Trust (bond), Mass.	16.5

5-year returns

	%
IDS Trust (coll. eq.), Minn.	24.0
EAFE	**24.0**
Marsh & McLellan Trust, Mass.	23.4
Bankers Trust (eq.), N.Y.	22.4
American Natl. (eq.), Chicago	22.0
US Trust (eq.), N.Y.	20.3
First of Chicago (eq.)	20.3
Centerre Trust (col. W), Mo.	20.2
Citicorp (eq.), N.Y.	19.4
First of Chicago (dlr. fix.)	19.2
Morgan Guaranty (eq.), N.Y.	18.8
Morgan Guaranty (bond), N.Y.	17.1
First of Chicago (non-dlr. fix.)	16.6
Bessemer Trust (E), N.Y.	15.7
Citicorp (fix.), N.Y.	15.2

10-year returns

	%
US Trust (eq.), N.Y.	21.1
EAFE	**20.3**
Morgan Guaranty (eq.), N.Y.	18.8
First of Chicago (eq.)	17.5

Top returns . . .

Continued from page 35
returned 35.8%.

The $5 million select equity fund of RepublicBank Dallas was the top-performing fund for the three-year period ended June 30 with a compound annual rate of return of 30.2%.

Ben Fischer, vice president of RepublicBank Dallas, said the fund, which holds no more than 10 names at any one time, makes its selections from the "fishing pond" of stock names generated by the bank's analysis group. He said about 90% of the research is generated internally.

He said the assets of the fund could be spread among several stocks or concentrated in one stock.

"We have several funds that are highly diversified. They might hold 50 or 60 names. This fund is an attempt to get to the other extreme," Mr. Fischer said.

Although there are no restrictions or guidelines on the fund, Mr. Fischer said the stocks in the portfolio are ones that generally have slipped through the cracks of Wall Street.

"They're not totally ignored, but they tend to be not well followed," he said.

The other top-performing funds for the three-year period were Fidelity Management Trust (aggressive equity), with an annualized 23.4%; First National Bank of Neenah (equity income), 22.7%; Chase Manhattan, 21.8%; and First of Boston, 20.9%.

The median fund in the PIPER universe had a compound annual return of 10.4% for the three-year period ended June 30, compared with the S&P 500's return of 19.3%.

The leading funds for the five-year period were Security Pacific, 36.4%; Chase Manhattan, 27.4%; Citicorp (real estate stock), New York, 25.4%, Provident National Bank, Philadelphia, 23.8%; and National Bank of Detroit, 23.2%.

Kenneth Statz, vice president and manager of the $30 million real estate stock fund at Citicorp Investment Management Inc., New York, said the fund's strong performance is due to the continual focus on real estate.

"The goal of this fund is quite simply to capture the returns from developing, managing and eventually selling income-producing real estate," said Mr. Statz.

"It's not just an odd stock that does well."

He said the fund has a core position of real estate investment trusts that ranges between 50% and 75% of the assets. The core now contains 65% of the portfolio's assets.

"Then to this we add selectively more interesting and perhaps more inefficiently priced real estate plays," Mr. Statz said.

For the five-year period ended June 30, the median fund in the PIPER universe had a compound annual return of 17%, compared with the S&P 500's 19.4%.

For the 10-year period, the top funds were Equitable Bank, 27.6%; MTrust, Dallas, 27.4%; California First Bank, 25.9%; Northern Central Bank, Williamsport, Pa., 24.7%; and Bankers Trust Co., New York, 24.4%.

William Jeffery III, president of California First Capital Management, La Jolla, the investment management subsidiary of California First Bank, said the $15 million supplemental equity fund has switched its focus to specialty retailers.

"It was heavy in technology stocks through mid-1983, then switched to specialty retailers as technology started to peter out," Mr. Jeffery said.

Technology stocks had represented as much as 80% of the portfolio's assets. Now, they make up about 20% of the assets while the specialty retailer group represents about 50% of the fund.

Mr. Jeffery also said the fund looks for companies with 30% earnings growth or more and market capitalization less than $250 million.

For the 10-year period, the median fund had a compound annual return of 18.8% while the S&P 500 returned 14.7%. ■

Commingled special equity funds

3-month returns

	%
Chase Manhattan, N.Y.	20.4
Security Pacific (G), Calif.	19.5
Northern Trust, Ill.	15.9
First of Neenah (reg. bank), Wis.	15.4
California First Bank	14.3
Republic Natl., Dallas	13.0
Marsh & McLennan Trust, Mass.	12.2
First of Neenah (cap. appr.)	11.9
Michigan Natl. of Grand Rapids	11.8
American Fletcher (E), Ind.	11.8
Bankers Trust, N.Y.	11.8
Man. Hanover (spec. eq.)	11.7
Comerica Bank, Mich.	11.7
Trust Co. of the West	11.4
Citicorp (emerg. health), N.Y.	11.3
Chemical Bank (F), N.Y.	11.0
Society National, Ohio	10.8
Northern Central, Pa.	10.6
Republic Natl., Dallas	10.6
Bank of New York (A)	10.1
First Pennsylvania Bank	10.0
First Tennessee, Memphis	9.5
Equitable Bank, Md.	9.5
Manufacturers Hanover (sup.)	9.4
Standard & Poor's 500	**5.9**

1 year returns

	%
Chase Manhattan (inter. cap.)	70.3
First of Neenah (reg. bank), Wis.	66.5
Security Pacific (G), Calif.	59.2
Fidelity Mgmt. Trust (ag.), Mass.	54.2
Equitable Bank, Md.	49.6
Trust Co. of the West	49.1
Northern Trust, Ill.	49.0
California First Bank	48.9
Republic Natl., Dallas	47.4
Manufacturers Hanover (sup.)	47.2
Man. Hanover (spec. eq.)	46.7
American Fletcher (E), Ind.	46.3
Society National, Ohio	45.5
Marsh & McLellan Trust, Mass.	45.2
Manufacturers Detroit (I)	44.9
Central Fidelity (agg. eq.), Va.	44.6
Republic Natl., Dallas	44.5
Irving Trust (II), N.Y.	44.3
Bankers Trust, N.Y.	43.6
Chemical Bank (F), N.Y.	42.7
Wellington Trust (non-tech), Mass.	42.1
Norwest Bank, Minn.	42.1
Wachovia Bank (div. sp.), N.C.	41.1
Provident National, Pa.	40.9
Standard & Poor's 500	**40.7**

3-year returns

	%
Republic National, Dallas	30.2
Fidelity Mgmt. Trust (agg. eq.)	23.4
First of Neenah (eq. income)	22.7
Chase Manhattan (inter. cap)	21.8
First of Boston, Mass.	20.9
Shawmut Bank, Mass.	20.5
American Fletcher (E), Ind.	20.2
Wachovia Bank (div. spec.), N.C.	19.9
Citicorp (r.e.), N.Y.	19.4
Standard & Poor's 500	**19.3**
LaSalle National, Ill.	18.9
Old Second Natl. (HR 10), Ill.	18.5
Associated Kellogg, Wis.	18.3
Mellon Bank, Pa.	18.1
First of Minneapolis (20)	17.7
Trust Co. of the West	17.7
Society National (Ohio), Ohio	17.3
Manufacturers Hanover, N.Y.	16.9
Provident National, Pa.	16.4
Natl. Bank of Detroit (op.)	16.3
Citicorp (spec. sit.), N.Y.	16.0
Manufacturers Hanover (uncorn.)	15.9

5-year returns

	%
Security Pacific (G), Calif.	36.4
Chase Manhattan (inter. cap.)	27.4
Citicorp (r.e.), N.Y.	25.4
Provident National, Pa.	23.8
National Bank of Detroit	23.2
Society National (Ohio), Ohio	23.0

Funds do well . . .

Continued from page 35

ket has contributed to the good performance. The firm has an 18% weighting in the Japanese market vs. a 50% suggested weighting by the EAFE, he said.

"Our investments have been centered around the financial and real estate-type stocks as interest rates have fallen in the Japanese marketplace," said Mr. Horseman.

Further, the fund is overweighted in the Spanish market, with a 15% weighting vs. the suggested EAFE weighting of 1%, said Chris Carter, investment manager. Portfolio managers are buying stocks of Spanish financial companies and banks and interest-sensitive issues such as utilities, he added.

"We have been buying in an environment of slow growth, falling interest rates and a falling U.S. dollar," said Mr. Carter. "We see no sign of that changing — the environment still seems one of very sluggish growth and disappointment on the earnings front. So we're investing in companies where we're confident of earnings coming through in every country."

Aetna MIM was second for the year, with a total return of 104.7%.

That $172 million fund is managed by MIM Ltd., London, which recently was purchased from the Aetna Life & Casualty Co., Hartford, Conn., by Britannia Arrow Holdings, London.

John Sullivan, director of Aetna MIM in Hartford, said the fund is overweighted in Japan — 60% vs. 50% for the index. "We avoided exposure to the Japanese export sector, which saved us a lot of problems.

"One Continental European market that helped us in the latter half of 1985 was that of Italy," said Mr. Sullivan. "We were overweighted in Italy and then cut back somewhat on holdings there in early 1986."

Bessemer Trust Co., New York, was third for the year, with a total return of 104.6%.

Fourth was Citicorp Investment Management Inc., London, with a total return of 102.3% on its more than $200 million international equity fund.

Good security selection that draws on the broad geographical coverage of Citicorp's offices is in part responsible for the fund's performance, said B. Hunt Whitbeck Jr., vice president.

"We emphasized Continental Europe in calendar 1985," he said. "We were overweighted in Germany, France and Italy and underweighted in Japan until the beginning of 1986."

Early this year, the fund's managers moved into Japan more heavily, choosing issues in the domestic sector, he said.

In December, the fund was weighted 31.2% in Japanese stocks; by June, that had increased to 47.2%, he added.

"Currently, we are slowing our exposure to Japan and looking back at Europe and some Asian markets for the rest of the year," said Mr. Whitbeck. Emphasis will be placed on stock picking in France, Spain, Hong Kong and Singapore, he added.

RepublicBank Dallas was fifth for the year, with a total return of 99.4%. The EAFE gained 89.4%.

For the three years ended June 30, BA Investment was first, with a compound annual return of 38.4%.

The EAFE was up 37.8% compounded annually for the three-year period.

Second for the three years was Aetna MIM's fund, with a compound annual return of 36.5%.

Bankers Trust Co., New York, and American National Bank of Chicago were third and fourth for the three years, with compound annual returns of 35.3% and 35.1%, respectively.

In fifth place for the three-year period was Marsh & McLennan Trust Co., Boston. That fund, managed by Putnam International Advisors, Boston, had a compound annual return of 35%.

For the five years ended June 30, IDS Trust, Minneapolis, was first. Its International Collective Equity fund, managed by IDS International Inc., London, had a compound annual return of 24%.

"We have consistently, over the five years, been in the right places," said Peter Lamaison, president of IDS International.

"In 1981 and 1982, for instance, that meant being mostly in cash and that cash was in the U.S. dollar," he explained. "And again in mid-1984, that meant being mostly in U.S. dollars."

Those currency plays were on the capital preservation side of the fund's strategy, he added.

"By and large, we have been in the correct markets and at the correct times, with about average weightings," he said. "We doubled the weightings in Europe at the expense of the Japanese market for most of last year, and Europe vastly outperformed Japan then."

At the turn of the year, the fund reversed itself in Europe and went underweighted there while increasing exposure to Japan. That move was due to the drop in oil prices of 1986, he said.

"The country that would benefit most from the drop in oil prices would be Japan," Mr. Lamaison explained.

The EAFE stood at 24% for the five-year period.

Marsh & McLennan Trust was second for the five-year period, with a compound annual return of 23.4%.

Third and fourth for the five years were Bankers Trust and American National Chicago, with compound annual total returns of 22.4% and 22%, respectively.

Fifth for the five-year period was U.S. Trust, with a compound annual total return of 20.3%.

For the 10 years ended June 30, U.S. Trust had the top fund, with a compound annual return of 21.1%.

The EAFE logged a compound annual total return of 20.3% for the 10 years.

Only three international commingled funds are monitored for the 10-year period. ■

Continued from page 36

Connecticut National Bank	23.0
Citicorp (spec. sit.), N.Y.	22.8
Bankers Trust, N.Y.	22.2
Norwest Bank, Minn.	21.8
First of Maryland	21.7
First Pennsylvania Bank	21.7
First of Boston, Mass.	21.3
California First Bank	21.0
Chase Manhattan (value), N.Y.	20.7
Northern Trust, Ill.	20.4
Standard & Poor's 500	**19.4**

10-year returns

	%
Equitable Bank, Md.	27.6
MTrust, Texas	27.4
California First Bank	25.9
Northern Central, Pa.	24.7
Bankers Trust, N.Y.	24.4
First of Maryland	23.4
Chase Manhattan (spec. eq.)	21.9
Bank of America, Calif.	21.7
Provident National, Pa.	21.3
Norwest Bank, Minn.	20.6
Connecticut Bank & Trust	20.6
Standard & Poor's 500	**14.7**

Corporate group expanding

NEW YORK — An effort by a lobbying group of corporate pension fund executives to expand the ranks is meeting with success, said W. Gordon Binns Jr., chairman of the Financial Executives Institute's Committee on Investment of Employee Benefits Assets.

A recent solicitation to corporate pension executives to become advisory members has drawn 56 favorable responses within three weeks of the mailing. Because the FEI limits full committee membership to 40, the pension fund group created the new membership category, explained Mr. Binns, who also is vice president and chief investment funds officer of General Motors Corp., New York.

Mr. Binns added he expects several hundred executives to respond favorably, based on the early results.

The FEI committee was organized to develop positions and lobby on behalf of corporate pension funds. Issues under study include proxy voting and corporate governance, directed commissions and incentive fees, manager performance, the use of futures and options, asset allocation strategies, the impact of the Financial Accounting Standards Board's new pension rules on investment policy, and funding of post-retirement benefits.

Advisory members, who pay an annual fee of $200, will receive position papers or studies; a monthly newsletter on developments in Washington affecting benefit funds, to be prepared by the Employee Benefit Research Institute; an annual meeting; and participation in the group's subcommittees. ■

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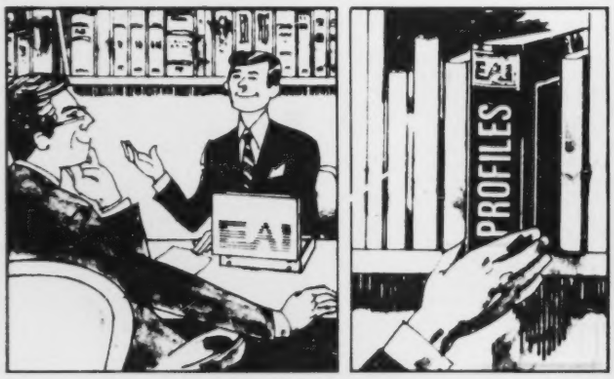

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Pensions & Investment Age

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United shifts to mutual fund format

By Barry B. Burr

CHICAGO — In a major switch to a mutual fund-like investment approach developed with Frank Russell Co., the $295 million United Air Lines Pilot Variable Plan on Nov. 1 will drop six managers, reassign four others and hire nine new ones.

In a separate matter, UAL Inc. hired David J. Dykstra, formerly manager of insurance and pensions of Midcon Corp., Lombard, Ill., to replace Robert J. Gillette as chief of United Air Lines Inc.'s $1.5 billion in pension assets.

Mr. Gillette joined Frank Russell Co., Tacoma, Wash., as a vice president-client executive and senior investment consultant. United, a longtime Russell client, will be one of Mr. Gillette's assignments, according to Jan Twardowski, Russell's managing director-consulting.

For the assets of the pilots' variable plan, which is a defined contribution plan run separately by the airline from its defined benefit plans' fund, United will drop six of the 10 managers, *Pensions & Investment Age* has learned.

The managers and the portfolios that will be dropped are:

• Batterymarch Financial Management, Boston, $73.3 million; Jennison Associates Capital Corp., New York, $32.1 million; Lincoln Capital Management Co., Chicago, $99.7 million — all in domestic equities;

• G.T. Capital Management Inc., San Francisco, $54 million in international equities;

• Wells Fargo Investment Advisors, San Francisco, $108.2 million in a Standard & Poor's 500 stock index fund; and

• Harris Trust and Savings Bank, Chicago, $148 million in government fixed income.

The new, customized mutual fund-like approach will have 13 managers, running nine portfolios, *P&I Age* learned. Some will receive more than one assignment.

The new portfolios and their managers are:

• Government fixed income: Frank Russell Trust Co., Tacoma, Wash., a Russell affiliate;

• S&P 500 stock index fund: Boston Safe Deposit & Trust Co., Boston;

• Intermediate fixed income: BEA Associates Inc. and Sanford C. Bernstein Inc., both of New York;

• Income- and value-oriented equities: Barrow Hanley Mewhinney & Strauss, Dal-

Continued on page 67

Inside:

CORPORATE FINANCE: While consumers shop at Consolidated Stores Corp.'s discount stores in the United States, the Columbus, Ohio, retailer shopped both the U.S. and European equity markets — page 3. Stories on Seagram's Swiss franc debt deal and People Express' new loan covenant woes — page 45.

REAL ESTATE: Because of overbuilding, office buildings such as this one in San Diego, Calif., make up a smaller percentage of the holdings of real estate managers than they once did. Details on this trend and others in the real estate directory — page 15.

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Index funds move the market

Their use of program trading is extensive, overlooked

By Chuck Paustian

NEW YORK — Stock index funds produced some of the major moves in the equity market during the past several weeks through their use of arbitrage program trading techniques.

Although brokerage firms and arbitrageurs have grabbed most of the program trading spotlight, stock index funds are just as responsible for some of the dramatic moves in the market.

On Sept. 2, for example, many Standard & Poor's 500 stock index fund managers sold the stocks in their portfolios and purchased the September futures contracts on the index to enhance returns or to increase liquidity.

That move was partly responsible for a decline of almost 28 points in the Dow Jones industrial average.

On Aug. 26, the DJIA climbed 32 points, in response to heavy arbitrage buying programs.

In addition, index funds were responsible for the stock market's 24-point rise June 20, the last "triple witching hour" day. On that day, 149 million shares were traded, but 41 million were bought at the day's close.

"That was the index funds having to close out their positions," said Robert N. Gordon, president of Twenty-First Securities Corp., a brokerage firm in New York.

"The time when the index funds (put on their positions) was June 9, and that day the market was down 45.75 points."

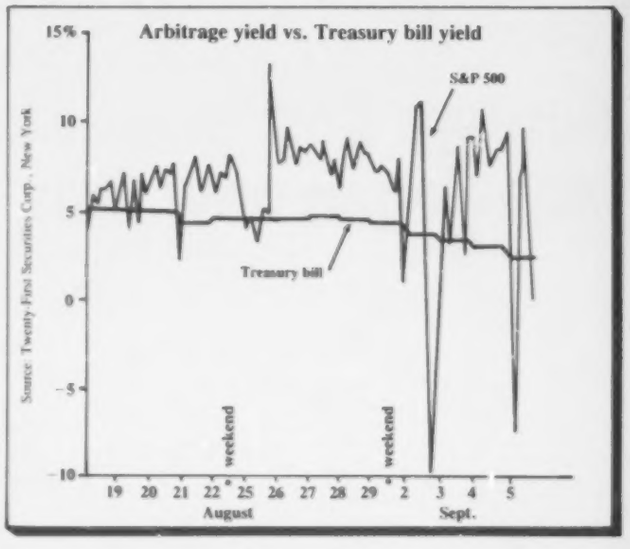
Twenty-First Securities runs about $110 million in arbitrage trading techniques for its taxable clients.

As of Sept. 10, it appeared stock index funds would not be a factor in the next triple witching hour day — Sept. 19, having had the opportunity to close their positions Sept. 8 and 9.

Although they would not speculate on their role in the next triple witching hour, index fund portfolio managers talked generally about their use of program trading.

Jeffery P. Ricker, an associate at Mellon Capital Management

Continued on page 66



California to create insurer

By Steve Hemmerick

SACRAMENTO, Calif. — California State Teachers' Retirement System officials have all but given up on finding a private insurer for fiduciary liability coverage, and said they will set up a joint powers authority to provide coverage Sept. 22.

Without the joint powers authority, fund trustees would have no fiduciary insurance and could face personal liability for the fund by the latter part of this month, said Larry Kurmel, executive officer for the $16 billion retirement system.

The joint powers authority essentially would allow a number of pension funds to insure themselves and each other until they can set up their own insurance company, probably by year end.

That company probably would be the first pension fund-owned insurer of its kind for pension funds, and the retirement system is seeking participation from funds nationwide.

Mr. Kurmel said he had hoped the threat of setting up a joint powers authority, the first step before setting up a reciprocal insurance company, would push private insurers into offering a fiduciary policy to the system. But that hasn't happened.

Yet, he said, the joint powers authority will be attractive in that it will provide at least the same coverage for the same cost as that provided by private insurers for the previous year's policies.

The teachers' privately provided policy expires this month. That policy gave the fund $5 million coverage per claim with a $100,000 deductible. The one-year policy cost $851,000.

Mr. Kurmel expects at least six, and maybe 12, public pension funds in California to join the

Continued on page 68

2 funds mull incentive fees

By Chuck Paustian

The $3.4 billion Iowa Public Employees' Retirement System, Des Moines, is negotiating with four of its investment managers on performance-based fee arrangements while the Florida State Board of Administration, Tallahassee, is considering using the fees.

"We are currently evaluating which performance-based fee model or structure we want to use" with two equity and two fixed-income managers, said Dennis Jacobs, Iowa's deputy administrator.

The Florida board, which oversees the investment of $12 billion in retirement assets, has started a study on performance-based fees, said William O. Bell, director of investment management analysis.

"I am looking into that (performance fees) right now to get more or less acquainted with the subject," said Mr. Bell. "But, as far as pursuing it actively, we're not doing that at this time."

These funds join the growing list of public pension funds, endowments and foundations that either will implement or are looking to implement performance fees.

Those types of funds are further along than their corporate counterparts in the performance-fee process because they have not needed approval from the Department of Labor.

Many corporate pension funds, governed by the Employee Retirement Income Security Act, are interested in performance-based fees, but have postponed any

Continued on page 65

Department of Labor offices sketch by Roger Schillerstrom

The shape of fees to come

DOL opinion may open doors to venture cap, realty

By Richard J. Gillespie

WASHINGTON — The Department of Labor's approval of performance-based fees for two money managers suggests the department will approve wider use of such fees, perhaps even in the real estate and venture capital areas.

While the money managers who requested performance-based fees mostly invest in securities for which market quotations are readily available, the Labor Department allowed for a small portion of the securities to be valued by independent appraisers. The lack of readily available market quotations is a problem for real estate and venture capital managers.

Ruling the separate arrangements requested by Batterymarch Investment Advisers, Boston, and BDN Advisors, New York, did not constitute violations of the Employee Retirement Income Security Act, the Labor Department in effect enabled managers to peg their fees to investment performance for the first time since the act was passed in 1974.

"You will see performance fees used more and more, and these steps taken by the Department of Labor, I think, have opened up the opportunity to introduce more flexibility," said Lawrence Haas, a principal with the Washington law firm Groom and Nordberg.

"This will remove a lot of uncertainty concerning the application of ERISA to incentive-fee arrangements," agreed Donald J. Myers, a partner with Pierson, Ball & Dowd, Washington.

"You will probably find considerable, but not universal, interest in this on the employer side," said Bronislaw Grala, a partner in the New York law firm of Cadwalader, Wickersham & Taft.

The Labor Department's advisory opinions do not change the law but merely interpret existing statutes, in this case the gray wording of Section 406(b)(1) of ERISA. Section 406(b) covers prohibited transactions, and 406(b)(1) specifically prohibits fiduciaries from dealing with plan assets in their own interests or for their own accounts.

According to Ivan Strasfeld, division chief for regulatory coordination, the Batterymarch and BDN requests were the only ones received since the Securities and

Continued on page 65

Alger losing clients from CIMCO list

By Steve Hemmerick

LOS ANGELES — Fred Alger Management Inc., New York, has failed to keep another account of Crocker Investment Management Corp., San Francisco, the investment advisory firm it bought out this summer.

Trustees for the $1.3 billion Los Angeles Water & Power Employees' Retirement Plan passed up Fred Alger Management in an extensive search and hired The Boston Co., Los Angeles, and Bank of California, San Francisco, as balanced managers.

In addition, trustees of the $2.7 billion San Francisco City and County Employees Retirement System considered reallocating $140 million in equities with CIMCO, but voted Sept. 10 to keep all but $10 million with the firm.

In the case of the Los Angeles fund, The Boston Co. will receive $500 million and Bank of California, $175 million in assets, all of which, except for some cash, had been with Crocker.

Fred Alger, president of Fred Alger Management, said he had hoped to win back the Los Angeles Water & Power plan when trustees decided to just let the plan's advisory contract with CIMCO expire June 30, shortly after Mr. Alger had announced he would buy CIMCO.

Trustees for the Water & Power plan considered Fred Alger Management in an extensive search for new managers, said Richard Goss, retirement plan administrator. But the trustees decided on the other managers, joining the ranks of former CIMCO clients including Contra Costa County Employees' Retirement Association, Martinez, Calif., and The Times Mirror Co., Los Angeles.

A year ago, CIMCO officials reported $1.6 billion in tax-exempt assets under management. It now reportedly has $500 million remaining in assets that had been managed by CIMCO. Part of the original amount had been assets managed for the then-parent bank, Crocker National Bank.

Contra Costa County and The Times Mirror dropped CIMCO before the purchase by Fred Alger had been completed. Officials for the two retirement systems said uncertainty about CIMCO's future played a major part in their decision. Earlier this year, Wells Fargo & Co., San Francisco, decided to buy Crocker National Corp., and then to sell CIMCO (*Pensions & Investment Age*, May 26).

Continued on page 65

Putnam Cos. sues 11 who began new firm

By Trudy Ring

BOSTON — The Putnam Cos. Inc. has filed suit against the 11 employees who left Putnam's international investment management arm to form a new firm.

The suit, filed Aug. 26 in Superior Court here, seeks to prevent the employees who left Putnam International Advisors Inc. and formed Oechsle International Advisors from seeking or accepting business from the clients they served at Putnam International.

It charges the employees sought to appropriate for their new business proprietary trade secrets and other confidential information from Putnam International. Putnam Cos.' president, Lawrence J. Lasser, claims in an affidavit filed with the suit that the former employees' actions, if unchecked, would "cripple or destroy Putnam International."

The 11, including Putnam International's president and chief investment officer, Walter Oechsle, left the firm in late August. They constituted Putnam International's entire investment management team; only the European marketing director and some analysts remained (*Pensions & Investment Age*, Sept. 1). Mr. Oechsle is managing general partner of the new firm.

The suit further seeks to prevent the Oechsle firm from having any dealings with Putnam International clients or consultants, soliciting accounts on the basis of past affiliations or investment performance with Putnam International, removing or making any use of the firm's client lists or other documents or offering employment to any of its workers.

Steve Langer, who had been Putnam International's product manager and is a general partner of Oechsle International, said the Putnam Cos.' lawsuit is "only meant to be a nuisance" and is an abuse of the legal process. "At the very least, the Putnam complaint is groundless," he said.

Oechsle International filed answers to the suit and a counterclaim Sept. 9. Oechsle's attorney, Edmund Case of the Boston law firm Testa, Hurwitz & Thibeault, said the filings deny Putnam Cos.' allegations and explain Oechsle's position.

Mr. Case said the lawsuit is an attempt to hinder Oechsle in legitimate competition with Putnam International. He said the Sept. 9 filings dispute Putnam International's allegations that Oechsle is using confidential material, saying this material, such as client names and addresses, is not confidential. He noted *P&I Age* regularly reports on new clients of investment firms.

In reply to charges that Oechsle International is seeking to take business from Putnam International, the filings say the 11 employees did not have employment contracts with Putnam International or non-competition agreements, so they were free to leave when they pleased and set up a competing business, Mr. Case said.

Putnam Cos.' suit also contends the employees contacted clients about their new firm while still employed by Putnam Interna-

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The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

P&I Age August indexes

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	7.42	22.54	39.15
Russell 3000[1]	6.81	22.02	37.21
Ryan Index[2]	2.78	16.99	28.0
Shearson Lehman Gov't./Corp.[2]	2.64	13.58	22.8

Source: Rogers, Casey and Barksdale Inc.
[1]Frank Russell Co. [2]Fixed income.

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Mississippi allocates 50% of fund to passive

By Trudy Ring

JACKSON, Miss. — The $2.7 billion Public Employees' Retirement System of Mississippi plans to increase its passive investments to 50% from 20% of the fund, affecting about $1 billion.

Toward that end, the system has hired a second bond index fund manager and plans to augment the amount run by existing stock and bond index fund managers, said Eddie B. Vandiver, deputy director-investments.

The system will supplement its increased passive commitment with more aggressive active managers, Mr. Vandiver said. It is conducting a search for growth stock managers, with plans to hire one or two this fall. Coming along with these changes is an increase in the fund's equity commitment to 25% from 20%, with passive equity investments making up half this amount.

To free up funds for the new strategy, the system terminated four of its 12 existing managers.

The new bond index fund manager is Wells Fargo Investment Advisors, San Francisco, whose fund will track the Salomon Brothers Broad Investment Grade bond index, Mr. Vandiver said. The initial allocation to Wells Fargo likely will be $300 million, eventually increasing to $500 million, he said.

The system also plans to increase the funding for Lehman Management Co., hired last spring to run $140 million in a customized bond index fund (*Pensions & Investment Age*, April 28). Lehman's index fund will be brought up to the same level as Wells Fargo's, Mr. Vandiver said. Lehman also handles an active bond account for the system.

To further implement the passive strategy, the system will increase, probably by $90 million, the stock index fund run by Bankers Trust Co. — Investment Management Group, New York, he said. The system has about $252 million in that fund now.

Terminated were active equity managers Eaton, Vance Management Inc., Boston, which had run $81 million, and Scudder, Stevens & Clark, New York, which managed $119 million; and active bond managers MacKay-Shields Financial Corp., New York, which ran, $263 million, and Wentworth, Hauser & Violich Inc., San Francisco, which handled $246 million.

"This was out of necessity due to the restructuring and redeployment of the assets," Mr. Vandiver said of the terminations. Some of the assets for the passive strategies will come from cash flow, he said.

SEI Funds Evaluation Services, Chicago, developed the asset allocation plan and assisted in the manager searches. ■

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Corrections & clarifications

• In the Aug. 4 directory of international managers, the asset allocation of **IDS International Inc.**, Minneapolis, was incorrect. As of March 31, IDS had $247 million invested in non-U.S. stocks; it has no foreign bond holdings. Also, it manages $128.6 million in mutual funds; IDS has no index funds.

• In an Aug. 18 article, New York City Comptroller **Harrison J. Goldin** was cited incorrectly as not disputing equity manager performance figures given by Finance Commissioner Abraham Biderman.

In his letter to the trustees, Mr. Goldin did not dispute the five-year figures, but did question others. Following publication, Mr. Goldin also contested the five-year figures, providing alternate data.

• In the Aug. 4 listing of the 100 largest financial institutions, **PNC Financial Corp.** should have shown discretionary assets of $32,638 million as of Dec. 31.

• **Scudder, Stevens & Clark**, New York, submitted an incorrect telephone number that was published in a profile of the firm in the directory of cash management services (*Pensions & Investment Age*, July 21). The correct number is (212) 350-8200.

Opinion

DOL report raises questions

A STUDY OF THE INVESTMENT performance of corporate pension funds sponsored by the Department of Labor raises troubling issues for pension funds, and at least the summary should be read by pension executives.

The general conclusion of the study supports earlier studies that show pension funds have, on average, underperformed the stock market.

Indeed, their performance even lagged the returns of 91-day Treasury bills, considered to be the risk-free rate.

While some consultants questioned whether the sample used in the study was large enough to draw meaningful conclusions and had other methodological questions, others declared the study was well done and said it confirmed the earlier results.

Explanations offered by the authors of the study, Stephen Berkowitz and Dennis Logue of Berkowitz, Logue & Associates, include excessive trading costs and too frequent changes in asset allocation.

The study noted poorer investment results among those plans that engaged in frequent changes of asset allocation or that did not rebalance to the original asset allocation after changes in market values among classes of assets, than among plans that maintained their original asset allocation.

The results suggest companies have been setting asset allocations for tactical purposes rather than strategic purposes, and have been no more successful in guessing which asset class would be the best performer over any particular time period than the balanced managers that many of them fired in the early to mid-'70s.

Many consultants have stressed that asset allocation is a long-term decision, not a short-term one to be adjusted every time the financial winds change direction. Pension executives clearly have not been listening, and the pension funds and the sponsoring companies have been paying the price.

Do trustees use too much power?

MANY BOARDS OF TRUSTEES of pension funds are exercising too much control over the day-to-day operations of the funds, an informal survey reported in the Sept. 1 issue of *Pensions & Investment Age* suggested.

The survey suggested some boards of trustees still make the final decisions on the hiring and the firing of investment managers.

Perhaps in smaller companies, where the treasurer oversees the pension fund as one of a multitude of responsibilities, this may be efficient and appropriate.

But in larger funds, with experienced full-time professionals overseeing the pension fund on a day-to-day basis, the role of the board of trustees should be one of oversight, not management.

The board of trustees should play the same role with the pension fund as the board of directors plays with the corporation. The board of directors is supposed to represent the shareholders and ensure management's efforts advance shareholders' interests. It is not supposed to manage the corporation itself.

The board of trustees of the pension fund has two constituencies to serve — the shareholders and the beneficiaries. When the interests of the two conflict, the Employee Retirement Income Security Act says the board must place the interests of the beneficiaries first.

In serving these constituencies, the board of trustees should give its advice and consent in the establishment of long-term investment objectives of the fund, including appropriate risk levels. It should monitor the steps taken to achieve those goals, including the selection of money managers, and it should also monitor the progress toward the goals.

It should then allow the professional managers, the fund executives, to hire and fire money managers, and even to choose which investment alternatives to use.

If it is dissatisfied with the money managers chosen or the progress being made toward the fund's goals, the board should replace the pension executives responsible for the day-to-day operations. When a board of trustees attempts to micromanage the pension fund, it risks introducing rigidities and inefficiencies into the process and may end up increasing the cost of the fund to the corporation.

Letters to the editor

Regan Money Mgrs.

To the Editor: Regan Money Managers was not included in the special profiles issue May 19.

The firm is at 3500 W. 80th St., Suite 195, Minneapolis, Minn. 55431; (612) 835-1185.

As of Jan. 1, assets under management totaled $65 million. Of that, $23 million was tax-exempt.

The firm is a balanced manager. In equities, our approach is a combination of value and timing. We see an evolving shift from earnings-driven to discount rate-driven market and emphasize companies with high and improving inflation-adjusted ROI vs. cost of capital.

In fixed income, we rely on interest rate anticipation.

Options and stock index and fixed-income futures are used.

As of Jan. 1, the tax-exempt asset mix was 35% stocks, 50% bonds and 15% cash. There were 21 corporate, foundation and jointly trusteed clients.

Minimum account size for separate management is $1 million. The firm invests $15 million for 401(k) and 457 savings plans, and has $2 million invested in international equities.

There are two portfolio managers. One hundred stocks are followed closely and 1,500, generally. One-fourth of the research is generated internally.

Robert M. Regan is chief investment officer and client contact.

Carol Blacklund
Regan Money Managers
Minneapolis

Westridge Capital

To the Editor: We at Westridge Capital are sorry we missed being listed in your profile issue.

Westridge Capital Management Inc. is at 444 S. Flower St., Los Angeles, Calif. 90017; (213) 622-4373.

Total assets managed as of Jan. 1 were $170 million, all of it tax exempt. We have seven tax-exempt clients, covering corporate, government and jointly trusteed funds. Minimum account size for separate management is $5 million. We run $11.5 million in equity index funds.

The firm specializes in asset allocation, cash management, equity/option strategic hedging and risk control. It buys optionable equities with strong near-term fundamental and technical factors and write options to lower volatility and enhance long-term returns.

There are two portfolio managers and two researchers. We follow 100 stocks closely and 400, generally. Sixty percent of research is generated internally.

Clients include Florida, K mart, and NL Industries.

James L. Carder, president, is the chief investment officer. Gerald Murchison, director of marketing, is the client contact.

Gerald Murchison
Director of marketing
Westridge Capital
Los Angeles

ABD International

To the Editor: Information on ABD International Management Corp., 10 E. 53rd St., New York, N.Y. 10022, was not included in the May 19 special profiles issue of *Pensions & Investment Age*.

The firm is an international equity manager whose investment style emphasizes an active approach to currencies and stock selection based on industry rotation both worldwide and within markets. The currency decision is considered separately from asset allocation and security selection. As of Jan. 1, assets under management totaled $1.053 billion, all tax-exempt.

The asset mix was 80.2% stocks, 1.4% bonds and 18.4% currency; $895 million was invested in international stocks, $56 million in international bonds and $102 million in cash.

The firm has 12 tax-exempt corporate and government clients.

Minimum account size for separate management is $15 million.

There are 10 portfolio managers. Stocks followed closely total 150, with 500 followed generally.

Clients include GM, PacTel, AT&T and Oregon.

ABD is owned by Dresdner Bank AG (Frankfurt) and Hypo-Bank AG (Munich). Assets under management by the parents and subsidiaries totaled $12 billion.

Chief investment officer is Ullrich S. Moser, president. Client contact is Jill B. Jordon, director of client services and marketing.

J. Eric Nelson
ABD International
New York

Group missed

To the Editor: I noticed your recent Cash Management Directory did not include the fourth cash management association in California, namely the Bay Area Cash Management Association. The details are:

Corporate membership: 46

Meetings: Third Tuesday, except December

Membership fee: $275 (includes NCCMA)

Contact: Janet Reinstra, Bank of America, P.O. Box 37000, San Francisco, Calif. 94137; (415) 622-5470.

Janet Reinstra
Vice president
Bank of America
San Francisco

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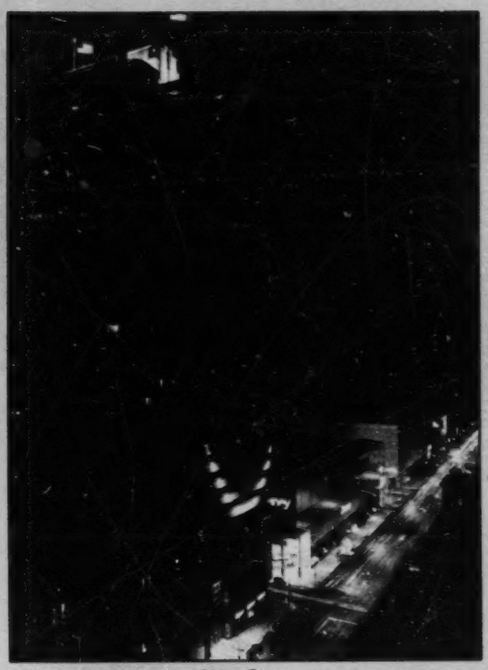
Real estate directory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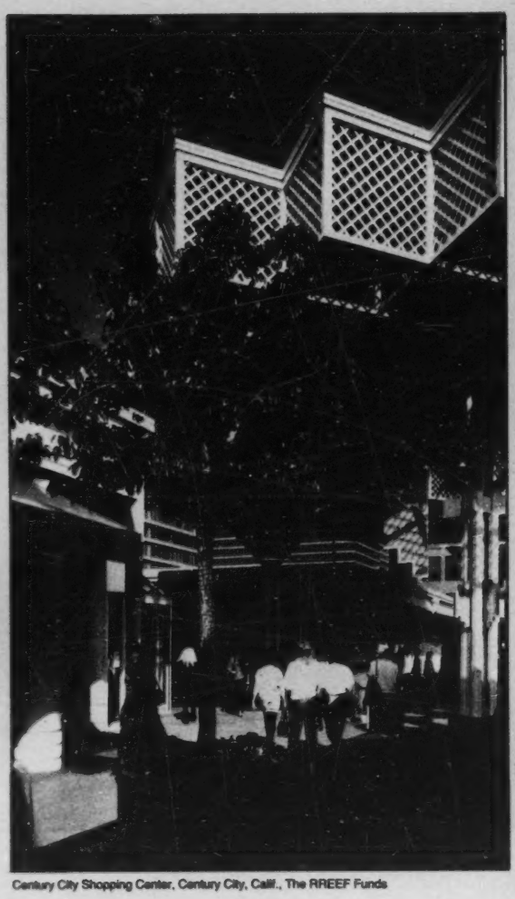
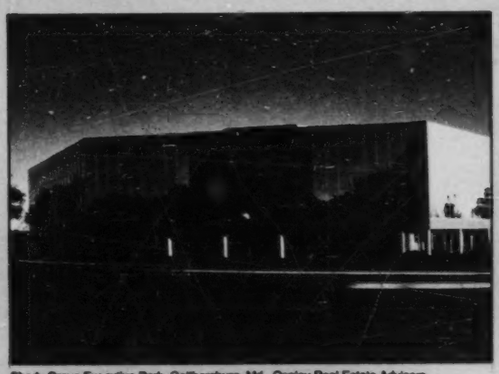

Century City Shopping Center, Century City, Calif., The RREEF Funds

Southridge, Atlanta, JMB Institutional Realty Corp.


Shady Grove Executive Park, Gaithersburg, Md., Copley Real Estate Advisors

Cloverleaf Mall, Richmond, Va., LaSalle Advisors Inc.

Investors place $5.6 billion of new business in direct accounts

By Steve Hemmerick

Pension plan executives earmarked almost half of their new real estate commitments for direct investment during the 12 months ended June 30.

Of the $12.3 billion in new business reported by 101 real estate managers surveyed by *Pensions & Investment Age*, $5.6 billion, or 45.5%, was in direct, separate accounts.

The use of direct investment in real estate in place of or in addition to pooled investments appears to be a growing trend in real estate investment, the survey showed.

Richard Ellis Inc., a New York firm that accepts only direct individual accounts, got the most new business during the 12 months, $1.02 billion.

All but one of the Top 10 firms in terms of new business cited individual accounts as an important, sometimes critical factor, in the amount of new business they received.

For example, during the 12-month period, Aetna Life & Casualty, Hartford, Conn., which ranked third in new business with $843 million, reported receiving $390 million, a little less than half of the total, in separate account business. JMB Institutional Realty Corp., Chicago, which only began accepting

Continued on page 40

Real estate investment advisers ranked by tax-exempt assets

Firm	Tax-exempt assets				Total assets			
	Total	Equity	Mortgages	Hybrid debt	Total taxable/ tax-exempt	Equity	Mortgages	Hybrid debt
1. Aetna Life & Casualty	15,858	2,538	12,187	1,133	21,533	3,547	16,853	1,133
2. Prudential Realty Group	6,428	6,118	310	0	33,558	15,812	17,747	0
3. Equitable Real Estate Investment Mgmt.	5,521	5,222	43	256	23,568	12,695	8,256	2,618
4. RREEF Funds	2,997	2,997	0	0	2,997	2,997	0	0
5. Heitman Advisory Corp.	2,918	2,918	0	0	3,189	3,189	0	0
6. Copley Real Estate Advisors	2,561	2,561	0	0	5,700	5,700	0	0
7. F.I.A. Associates	2,269	834	0	1,435	2,269	834	0	1,435
8. LaSalle Advisors Inc.	2,206	2,206	0	0	2,206	2,206	0	0
9. Corporate Property Investors	2,028	2,028	0	0	3,050	2,672	378	0
10. Balcor Institutional Realty Advisors	1,854	297	0	1,556	2,758	1,202	0	1,556
11. JMB Institutional Realty Corp.	1,777	1,777	0	0	13,580	13,404	0	176
12. Aldrich, Eastman & Waltch Inc.	1,700	300	100	1,300	1,700	300	100	1,300
13. Boston Co. Real Estate Counsel Inc.	1,391	93	0	1,298	1,551	253	0	1,298
14. Eastdil Realty Inc.	1,307	1,227	15	65	1,480	1,400	15	65
15. CIGNA Asset Advisers Inc.	1,058	1,058	0	0	10,764	2,274	8,490	0
16. PSI Institutional Realty	1,017	1,017	0	0	2,057	2,057	0	0
17. First Chicago Investment Advisors	921	921	0	0	976	976	0	0
18. Jones Lang Wootton Realty Advisors	900	620	0	280	1,480	1,200	0	280
19. TCW Realty Advisors	857	545	0	312	857	545	0	312
20. John Hancock Financial Services	838	838	0	0	10,213	1,834	8,379	0
21. J.P. Morgan Investment Mgmt. Inc.	835	57	0	778	1,356	472	0	728
22. Mellon Real Estate Investment Mgmt. Corp.	800	359	131	310	800	359	131	310
23. L.J. Melody & Co.	795	0	312	483	2,032	0	1,230	802
24. Alex. Brown Realty	775	0	0	775	775	0	0	775
25. Citicorp Investment Management	775	573	67	135	1,273	1,072	67	135
26. Security Capital Real Estate Corp.	753	753	0	0	1,010	1,010	0	0
27. Wells Fargo Realty Advisers	731	232	313	186	2,692	232	2,274	186
28. Manufacturers Hanover Investment Corp.	660	75	585	0	660	75	585	0
29. Richard Ellis Inc.	642	544	0	98	2,146	1,921	0	225
30. Kennedy Associates Real Estate Counsel Inc.	634	257	52	325	633	257	52	325
31. Wachovia Real Estate Fund	627	627	0	0	646	646	0	0
32. Coldwell Banker	592	592	0	0	710	710	0	0
33. NCNB National Bank	577	577	0	0	577	577	0	0
34. Travelers	547	468	79	0	18,313	1,513	16,800	0
35. Property Capital Associates	544	544	0	0	660	660	0	0
36. Lomas & Nettleton Co.	507	0	507	0	507	0	507	0
37. Lehndorff & Babson Real Estate Counsel	503	503	0	0	1,523	1,523	0	0
38. Karsten Institutional Realty Advisors	497	231	194	72	767	499	194	74
39. Metropolitan Life	493	422	71	0	17,230	5,950	11,280	0
40. John McMahan Associates Inc.	485	471	0	14	500	486	0	14
41. Scudder Realty Advisors Inc.	440	40	280	120	440	40	280	120
42. Am Cal Co.	396	232	164	0	396	232	164	0
43. New England Mutual Life**	392	NA	NA	NA	NA	NA	NA	NA
44. Goldman, Sachs & Co.	366	366	0	0	636	636	0	0
45. Chestertons USA	323	323	0	0	646	646	0	0
46. PM Realty Advisors Inc.	251	145	0	106	251	145	0	106
47. Grubb & Ellis Co.	240	203	37	0	1,412	1,375	37	0
48. First National Bank of Boston	239	185	0	53	239	185	0	53
49. State Street Bank and Trust Co.***	230	134	0	96	359	134	0	96
50. Palmieri Co.	225	110	70	45	1,875	310	1,520	45
51. Union Labor Life Insurance Co.	223	0	223	0	435	212	223	0
52. Trident/Meyer Real Estate Advisors	204	172	0	32	204	172	0	32
53. Frank Russell Trust Co.	159	159	0	0	159	159	0	0
54. Phoenix Mutual Life Insurance Co.	134	134	0	0	1,424	406	1,018	0
55. Bennett and Kahnweiler Realty	125	125	0	0	400	400	0	0
56. Landauer Advisors Inc.	113	113	0	0	312	312	0	0
57. Southland Trust Co.	113	113	0	0	113	113	0	0
58. Lieberman Companies	110	0	110	0	110	0	110	0
59. Equitec Institutional Realty Advisors Inc.	106	106	0	0	1,500	15,000	0	0
60. Loeb Partner Realty	100	100	0	0	450	450	0	0
61. SUHRCO Real Estate Advisors Inc.	88	NA	NA	NA	108	NA	NA	NA
62. Bank of America Investment Real Estate	85	85	0	0	400	400	0	0
63. Northern Trust Co.	85	85	0	0	NA	NA	NA	NA
64. ICC Realty Advisors Inc.	76	6	70	0	76	6	70	0
65. Chase Investors Management	66	14	0	52	1,553	1,385	29	139
66. Fayez Sarofim & Co.	63	0	53	10	63	0	53	10
67. First Asset Realty Advisors	61	61	0	0	51	51	0	0
68. Massachusetts Mutual Life Insurance	58	58	0	0	2,507	334	2,173	0
69. Schroder Real Estate Associates	50	50	0	0	1,054	888	0	166
70. RepublicBank Dallas	46	38	0	8	46	38	0	8
71. Acquest Capital Management Inc.	43	7	12	24	78	15	12	51
72. Hayden, Tolzmann & Associates Inc.	36	36	0	0	36	36	0	0
73. MRealty Corp.	35	30	0	5	100	90	0	10
74. New York Life Insurance Co.	31	31	0	0	7,252	530	6,722	0
75. Chemical Bank	27	13	0	13	39	25	0	13
76. Mutual Benefit Life	27	27	0	0	27	27	0	0
77. D.A. Management Inc.	26	4	22	0	84	34	50	0
78. Third National Bank	25	22	0	3	71	68	0	3
79. Tomlin Properties Inc.	21	21	0	0	450	450	0	0
80. Harris Trust & Savings Bank	20	18	0	2	20	18	0	2
81. Peckham Boston Co.	18	18	0	0	18	18	0	0
82. Continental Forest Investments Inc.	10	10	0	0	40	40	0	0
83. HT Investors	10	NA	NA	NA	10	NA	NA	NA
84. T.W. Richardson & Co.	9	9	0	0	9	9	0	0
85. American Agricultural Investment Mgmt.	9	9	0	0	9	9	0	0
86. First Wisconsin Trust Co.	7	7	0	0	20	0	0	0
87. Boston Financial Real Estate Advisors	5	5	0	0	3,600	800	2,800	0
88. Principal Mutual Life Insurance	4	4	0	0	7,065	98	6,967	0
89. Mercantile Bank	4	0	0	0	4	0	0	0
90. ACP Advisers Inc.	0	0	0	0	378	378	0	0
91. AMB Investments Inc.	0	0	0	0	190	190	0	0
92. AgriVest	0	0	0	0	475	40	435	0
93. Angeles Institutional Advisors Inc.	0	0	0	0	800	NA	NA	NA
94. Cambridge Realty Capital Ltd.	0	0	0	0	0	0	0	0
95. Centerre Trust Co. of St. Louis	0	0	0	0	3	3	0	0
96. Cushman & Wakefield Realty Advisors	0	0	0	0	1,600	0	0	1,600
97. Dedenham Tewson & Chinnocks Associates	0	0	0	0	350	350	0	0
98. Forest Investment Associates*	NA	NA	NA	NA	NA	NA	NA	NA
99. Jacques & Kurdziel Ltd.	0	0	0	0	204	NA	NA	NA
100. Lexington Co.	0	0	0	0	50	50	0	0

NA Not available

*Would not disclose information

**Included in Copley Real Estate Advisors

***Total includes cash account

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ACP Advisers Inc.

400 Park Ave., New York, N.Y., 10022; (212) 826-9700

Total real estate assets	$378 million
Equity	$378 million

As of June 30, ACP Advisers managed $378 million in real estate equity. The firm has no tax-exempt clients.

Fifty percent of the assets were invested for foreign clients.

The firm invests in office buildings, shopping centers, apartment buildings and land.

ACP Capital Appreciation Fund, a limited partnership is accepting tax-exempt contributions and will close Dec. 31. It invests in turnaround properties.

Daniele Bodini, president, is in charge of making property investments. Debra Flanz, vice president, is the client contact.

Acquest Capital Management Inc.

300 E. Long Lake Road, Suite 280, Bloomfield Hills, Mich. 48013; (313) 645-5130

Tax-exempt real estate assets	$43 million
Equity	$7 million
Hybrid debt	$24 million
Mortgages	$12 million
Tax-exempt real estate clients	7
Total real estate assets	$78 million
Equity	$15 million
Hybrid debt	$51 million
Mortgages	$12 million

As of June 30, Acquest Capital Management managed $43 million in tax-exempt real estate. The firm's holdings had a book value of $5.2 million in equities, $8 million in hybrid debt and $3.8 million in mortgages. Contributions committed but not yet received accounted for $2 million, $16 million and $8 million, respectively.

All the assets were in direct, separate accounts. Acquest Capital invests 25% in existing properties and 75% in development properties.

Its asset mix by property type was 45% office, 25% light industrial, 15% residential and 15% hotels. Properties are acquired nationwide with a Midwest emphasis.

It conducts computer-based analysis of monthly operating statements with regular feedback to outside property management firms and clients. Employees visit sites at least quarterly.

Clients include Dow Chemical, Operating Engineers' pension fund and Carpenters' pension trust fund.

David G. Ong, president, is in charge of making property investments and is the client contact.

Aetna Life & Casualty

151 Farmington Ave., Hartford, Conn. 06156; (203) 636-6226

Tax-exempt real estate assets	$15,858 million
Equity	$2,538 million
Hybrid debt	$1,133 million
Mortgages	$12,187 million
Tax-exempt real estate clients	585
Total real estate assets	$21,533 million
Equity	$3,547 million
Hybrid debt	$1,133 million
Mortgages	$16,853 million

As of June 30, Aetna Life managed almost $15.9 billion in tax-exempt real estate assets; $2.5 billion in equity, $1.1 billion in hybrid debt and $12.2 billion in mortgages.

The equity assets had market value of $1.96 billion and book value of $1.79 billion. Contributions received but not invested totaled $164 million and contributions committed but not yet received, $412 million. There was $45.1 million in debt connected with the properties.

The hybrid debt holdings had market value of $977 million and book value of $891 million. Contributions received but not invested totaled $56 million and contributions committed but not received, $100 million.

Commingled funds held $2.2 billion in equity, $993 million in hybrid debt and $12.2 billion in mortgages. Direct separate accounts comprised $302 million in equity and $140 million in hybrid debt.

Ninety-seven percent of tax-exempt assets are invested in existing properties and 3% in development properties.

The mix by property type is office, 42%; office research and development, 15%; apartments, 14%; retail, 13%; industrial, 8%; hotel, 8%.

Its current emphasis is on apartment development projects on a forward commitment basis with experienced developers focusing on the West and Northeast, and retail facilities with special niches or potential.

Either developer/partners or local, third-party managers are retained for day-to-day, on-site management, supervised by Aetna's staff. Frequent on-site inspections are made.

Aetna offers commingled open- and closed-end equity accounts and participating mortgages accounts; individual separate accounts; and single property separate accounts.

Real Estate Separate Account, an open-end fund, makes equity real estate investments structured either as joint ventures or wholly owned properties. All property types are represented, and are either existing, well-leased buildings or to-be-built projects.

Participating Mortgage Separate Account, also open-end, invests through tax-efficient land-purchase, lease-back structures.

Union Separate Account, open-end, makes participating mortgage investments in union-built properties. Investments are diversified by property type and location.

The investments of the Closed-End Real Estate Separate Account I include five office buildings, five office/research and development facilities and one industrial property.

Closed-End Real Estate Separate Account II differs from CERESA I in that it places greater empnasis on apartment complexes, to-be-built projects and use of forward commitments. Investments include three apartments, one office building and one office/research and development facility. The expected terms of both CERESA I and II are 12 years.

The Apartment Development Fund, a closed-end fund, invests exclusively in to-be-built apartment complexes using joint venture partnerships with major developers. It seeks projects in high-demand locations, typically low-rise suburban garden apartments. The expected term is seven years.

William M. Russell, senior vice president-real estate equity investments and Blake W. Irons, senior vice president-real estate finance, are in charge of making property investments. T. Jerald Moore, vice president-employee benefits division, is the client contact.

AgriVest

500 Winding Brook Drive, P.O. Box 996, Glastonbury, Conn. 06033; (203) 659-3711

Total real estate assets	$475 million
Equity	$40 million
Mortgages	$435 million

Agrivest had $475 million under management as of June 30. The firm had no tax-exempt clients.

Assets are invested in prime agricultural real estate and portfolios are individually managed.

The firm retains local property managers for on-site management. Officers of the firm periodically visit all properties.

AgriVest is the adviser and property manager for an agricultural real estate fund now being offered on a private placement basis to institutional investors.

James B. McCandless, executive vice president, is in charge of property investments. George E. Schwab, president, is the client contact.

The institutional brokerage sur-

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For further information call:
Frank B. McBrearity, Jr., President

LANDAUER
ADVISORS INC.
335 Madison Avenue, New York, NY 10017 (212) 697-2323

Aldrich, Eastman & Waltch

265 Franklin St., Boston, Mass. 02110; (617) 439-9000

Tax-exempt real estate assets	$1,700 million
Equity	$300 million
Hybrid debt	$1,300 million
Mortgages	$100 million
Total real estate assets	$1,700 million
Equity	$300 million
Hybrid debt	$1,300 million
Mortgages	$100 million

As of June 30, $230 million in tax-exempt real estate assets held by Aldrich, Eastman & Waltch Inc. were in commingled or pooled funds: $130 million in equity and $100 million in hybrid debt. Direct, separate accounts held $1.47 billion, of which $170 million was in equity, $1.2 billion in hybrid debt and $100 million in mortgages.

Its tax-exempt assets were invested 95% in existing properties and 5% in development properties. The asset mix by property type was retail, 55%; office, 30%; industrial/research and development, 10%; and development, 5%.

Aldrich, Eastman & Waltch serves as the real estate investment adviser to State Street Bank and Trust Co.'s series of closed-end, commingled funds.

Properties are concentrated in the East and West.

There are various property management arrangements depending on investment structure and property needs. The borrower/partner is often the property manager. For fee-owned properties, an incentive compensated manager is hired when implementing leasing or capital improvement programs. For general maintenance, a contract manager will be considered. Properties are visited quarterly.

Thomas G. Eastman, chief investment officer, is in charge of making property investments. G. William Helm Jr., president, is client contact.

AMB Investments Inc.

345 California St., 29th floor, San Francisco, Calif. 94104; (415) 956-5100

Total real estate assets	$190 million
Equity	$190 million

As of June 30, AMB Investments Inc. had $190 million in equities under management in taxable accounts. It had no tax-exempt clients.

It offers separate accounts for investment in commercial real estate in the West. Substantially leased projects with minimal leasing exposure in the near term are sought.

Douglas D. Abbey, principal, is in charge of making property investments. T. Robert Burke, principal, is the client contact.

Am Cal Co.

4730 Woodman Ave., Suite 220, Sherman Oaks, Calif. 91423; (818) 990-3250

Tax-exempt real estate assets	$396 million
Equity	$232 million
Mortgages	$164 million
Tax-exempt real estate clients	6
Total real estate assets	$396 million
Equity	$232 million
Mortgages	$164 million

As of June 30, Am Cal Co. had $396 million in tax-exempt real estate assets under management. Of the $231.9 million in equity holdings, $9 million was in contributions committed, not yet received and $24.5 million was in contributions received, not invested. Am Cal's mortgage total included $8.5 million in contributions received, but not yet invested.

The book value of equity holdings was $192 million, the market value was $198 million. The book and market values of the mortgage holdings were $156 million each.

Of the total, $10 million was in commingled equity funds and $386.2 million was in direct separate accounts.

Ninety percent of the tax-exempt assets are invested in existing properties and 10% in development properties. The asset mix by property type is: retail, 26%; office, 13%; apartments, 6%; industrial, 12%; medical, 8%; warehouse, 5%; office warehouse, 18%; bank buildings, 4%. Am Cal also held 10% in cash equivalents.

Am Cal's acquisition emphasis is on industrial, strip centers, office and mini-warehouse properties nationwide. It also seeks forward loan commitments on properties in Hawaii and Southern California.

Staff on-site inspections are made before investment and at least semiannually thereafter.

Clients include Missouri State Employees', Hawaii Development Foundation, Centerre Trust Co. of St. Louis and Southeastern Electrical Retirement System.

Cathy Duggan is in charge of making property investments. S.Q. Della-Grotta, executive vice president, is the client contact.

American Agricultural Investment Management

2603 W. 22nd St., Suite 17, Oak Brook, Ill. 60521; (312) 654-6616

Tax-exempt real estate assets	$9 million
Equity	$9 million
Total real estate assets	$9 million
Equity	$9 million

As of June 30, American Agricultural Investment Management Co. Inc. had $9 million in tax-exempt assets under management, all in real estate equity.

The book and market values of the holdings were $9 million.

All of the tax-exempt assets are invested in existing properties nationwide.

The firm offers closed-end equity group trusts and uses regional property management firms. Its three Heartland Group Trusts make equity investments in productive farmland.

H. Joseph Bourn, president, is in charge of making property investments, and is the client contact.

Angeles Institutional Advisors Inc.

10301 W. Pico Blvd., Los Angeles, Calif. 90064; (213) 277-4900

Total real estate assets	$800 million

Angeles Institutional Advisors Inc. has no U.S. institutional tax-exempt clients. Its taxable assets are invested in existing properties, primarily apartments, offices and shopping centers.

Richard H. Tourtelot, executive vice president-acquisitions, is in charge of property investments. Mark W. Gibello, president, is the client contact.

b

Balcor Institutional Realty Advisors Inc.

4849 Golf Road, Skokie, Ill. 60077; (312) 676-6980

Tax-exempt real estate assets	$1,853 million
Equity	$297 million
Hybrid debt	$1,556 million
Tax-exempt real estate clients	193
Total real estate assets	$2,758 million
Equity	$1,202 million
Hybrid debt	$1,556 million

As of June 30, the book value of Balcor Institutional's pure equity real estate holdings for tax-exempt clients was $290.5 million; market value was $297.3 million.

The values of its hybrid debt holdings were $1.38 billion and $1.56 billion, respectively. These assets include a small percentage of mortgages without equity participations or wrap-around features.

All the tax-exempt assets were in commingled or pooled funds; 70% is invested in existing properties and 30% in development properties.

Balcor Institutional, a subsidiary of The Balcor Co., acquires office, retail, residential, mini-warehouses, mobile home parks and industrial properties nationwide, avoiding the Southwest.

Balcor Institutional has several limited partnerships: Balcor Pension Investors (BPI) closed in 1980 and has $71.7 million; BPI-II closed in 1981 and has $85 million; BPI-III closed in 1982 and has $118.7 million; BPI-IV closed in 1983 and has $214.8 million; BPI-V closed in 1984 and has $219.7 million; BPI-VI closed in 1984 and has $345.6 million; BPI-VII is open and has $48 million; Balcor Equity Pension Inves-

A Commentary from
the "Recognized Authority in Real Estate Appraisal"

WHEN YOU'RE IN REAL ESTATE, YOU SHOULD KNOW THE RULES OF THE GAME.

The play-by-play in real estate used to be simple:
Invest
Property appreciates in value
Sell property

But today properties don't automatically increase in value due to overbuilt markets, slowing inflation, and other uncertainties. To understand how a property is valued in this more complex arena, investors need to know the rules and hire the appraisers who follow them.

Unfortunately, not everyone plays by the same rules. There are no industry-wide standards for real estate appraisers. Not yet. But the American Institute of Real Estate Appraisers (the Appraisal Institute) has offered its own Standards of Professional Practice as a model for nationwide legislation because we think they are the best anywhere.

Standard 1: "In developing a real estate appraisal, an appraiser must be aware of, understand, and correctly employ those recognized methods and techniques that are necessary to produce a credible appraisal."

Standard 2: "In reporting the results of a real estate appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading."

They sound simple, but these two rules cover just about any type of appraisal assignment. Twenty pages of explanatory comments accompany these standards, along with guide notes on specific types of assignments and our Code of Professional Ethics.

Who listens to the Appraisal Institute? Federal agencies and the leading federal mortgage insurers do. This year, the FHA, Fannie Mae, and Freddie Mac all adopted new appraisal guidelines that require appraisers to consider the effects of sales concessions and atypical financing on a property's value. The Institute's Standards already contained this requirement.

So, when you want to know the value of a property, hire an MAI or an RM, designated members of the Institute that wrote the rules.

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ors (BEPI) closed in 1984 and has $179.6 million; BEPI-II closed in 1985 and has $234.9 million; and BEPI-III is open and has $171 million.

The BPI series are all hybrid debt programs; the BEPI series splits investments roughly 50-50 between hybrid debt and all-cash equity.

Its management is handled by Balcor Property Management Co., with outside managers used infrequently.

Clients include Sherwin Williams, United Artists, New York State Teamsters and Minneapolis Employees.

John L. West, executive vice president, is the client contact.

Bank of America Investment Real Estate

180 Montgomery St., Suite 2300, San Francisco, Calif. 94104; (415) 622-3960

Tax-exempt real estate assets	$85 million
Equity	$85 million
Tax-exempt real estate clients	152
Total real estate assets managed	$400 million
Equity	$400 million

As of June 30, Bank of America had $63 million in commingled or pooled real estate equity funds and $22 million in direct, separate accounts for tax-exempt clients.

Of the total, $315 million was invested for foreign clients.

All of the tax-exempt assets are invested in existing properties. The asset mix by property type is 30% shopping centers, 32% office buildings, 31% research and development and 7% light industrial. It concentrates on 5- to 10-year-old properties in major metropolitan areas generally on the West or East coasts.

Bank of America Real Estate Fund, an open-end fund, is undergoing liquidations.

Management of most properties is contracted to on-site managers who are overseen by the asset management section.

William D. Reiss, vice president and director of acquisitions, is in charge of making property investments. Jack S. Cooper, vice president and managing director, is the client contact.

Bennett and Kahnweiler Realty Advisors

9700 W. Bryn Mawr, Rosemont, Ill. 60018; (312) 671-7911

Tax-exempt real estate assets	$125 million
Equity	$125 million
Tax-exempt real estate clients	2
Total real estate assets	$400 million
Equity	$400 million

As of June 30, Bennett and Kahnweiler Realty Advisors managed $125 million in real estate equity. Of the total, $75 million was for contributions received but not invested. The firm's property holdings had a book value of $50 million.

The tax-exempt assets are in direct, separate accounts for two public fund clients.

Of the tax-exempt assets, 75% is invested in existing properties and 25%, in development properties. The asset mix by property type is: offices, 40%; industrial, 50%; retail, 10%.

Top 10 real estate managers ranked by tax-exempt assets in real estate equity ($ millions)

	Firm	Equity
1.	Prudential Realty Group	$6,118
2.	Equitable Real Estate Investment Mgmt.	5,222
3.	RREEF Funds	2,997
4.	Heitman Advisory Corp.	2,918
5.	Copley Real Estate Advisors	2,561
6.	Aetna Life & Casualty	2,537
7.	LaSalle Advisors Inc.	2,206
8.	Corporate Property Investors	2,028
9.	JMB Institutional Realty Corp.	1,777
10.	Eastdil Realty Inc.	1,227

It emphasizes retail, industrial, apartments and land in the Midwest and Rocky Mountain regions. The firm generally does its own property management.

Clients are the Illinois teachers' retirement system and Ohio teachers' retirement system.

James S. Smith, president, is in charge of making property investments and is the client contact.

The Boston Company Real Estate Counsel Inc.

1 Boston Place, Boston, Mass. 02106; (617) 722-7190

Tax-exempt real estate assets	$1,391 million
Equity	$93 million
Hybrid debt	$1,298 million
Tax-exempt real estate clients	15
Total real estate assets managed	$1,551 million
Equity	$253 million
Hybrid debt	$1,298 million

As of June 30, the Boston Company Real Estate Counsel Inc. managed $1.39 billion in real estate assets for 14 tax-exempt clients, all in direct, separate accounts.

Of that, $120 in hybrid debt was in contributions committed but not yet received. The firm's holdings, including hybrid debt, had a book value of $1.24 billion and a market value of $1.27 billion. The pure equity investments had $48 million in debt connected with them, and the hybrid debt, $96 million.

Of the tax-exempt assets, 92% is invested in existing properties and 8% in development properties. The mix by property type is: office, 71%; industrial, 3%; research and development, 6%; retail, 19%; and mixed use, 1%.

The firm's tax-exempt real estate assets are invested mostly in hybrid debt, and investments are made in properties appropriate to client portfolios nationwide.

Clients include AT&T, GM, Rockwell International and Texas Teachers.

Mary L. Johnston, senior vice president, is in charge of making property investments. Robert A. Radloff, president, is the client contact.

Boston Financial Real Estate Advisors

225 Franklin St., 29th floor, Boston, Mass., 02110; (617) 542-4475

Tax-exempt real estate assets	$5 million
Equity	$5 million
Tax-exempt real estate clients	1
Total real estate assets	$3,600 million
Equity	$800 million
Mortgages	$2,800 million

As of June 30, Boston Financial Real Estate Advisors managed $5 million in tax-exempt real estate assets.

The amount, representing contributions committed but not yet received, is all for one commingled account.

The firm offers a closed-end equity real estate fund and direct separate account investment management service.

The commingled fund, Boston Financial Real Estate Equity Group Trust, is open for subscription until April 30; a $20 million minimum is necessary before investment can begin.

The firm plans on investing in mixed-use existing properties in 57 target secondary growth markets. Boston Financial Property Management will be retained as on-site property manager or as supervisor/adviser to an independent local property manager.

Its tax-exempt client is Massachusetts.

Duncan Chisholm, senior vice president, is in charge of making property investments. Peter F. Tague, senior vice president, is the client contact.

Alex. Brown Realty Advisors

225 E. Redwood St., Baltimore, Md. 21202; (301) 727-3884

Tax-exempt real estate assets	$775 million
Hybrid debt	$775 million
Tax-exempt real estate clients	3
Total real estate assets	$775 million
Hybrid debt	$775 million

As of June 30, the book value of Alex. Brown Realty Advisors Inc.'s hybrid debt holdings for tax-exempt clients was $346 million; market value was $367 million.

Contributions received but not invested accounted for $408 million of the total assets.

All of the assets were in direct, separate accounts; 70% is invested in existing property and 30% in development property.

The asset mix by property type is: office, 55%; industrial, 5%; retail, 15%; residential, 5%; hotels, 20%.

Acquisition emphasis is on industrial, office and retail properties nationwide.

Its asset management style is strongly detail oriented. Sites are visited quarterly. The developer/owner does the property management, and the managers usually have an equity interest in the projects.

Clients include Oregon Public Employes, Texas Teachers and Virginia Supplemental Retirement System.

Robert H. Gidel, president, is in charge of making property investments. William K. Morrill Jr. is the client contact.

Cambridge Realty Capital

200 W. Superior, Chicago, Ill. 60610; (312) 943-1911

As of June 30, Cambridge Realty Capital Ltd. had no real estate assets under management.

It plans to actively enter the tax-exempt market, offering direct, separate accounts, targeting office, retail and industrial sites. It will acquire properties nationwide with an emphasis on the Midwest.

Jeffrey A. Davis, client contact, will be in charge of making property investments.

Centerre Trust Co. of St. Louis

510 Locust St., St. Louis, Mo. 63101; (314) 436-9014

Tax-exempt real estate assets	$2.5 million
Equity	$2.5 million
Tax-exempt real estate clients	1

As of June 30, Centerre Trust Co. of St. Louis managed $2.5 million in tax-exempt equity real estate investments for one corporate client.

All of the assets are in existing properties.

The firm offers an open-end equity real estate fund and seeks income-producing properties nationwide.

Centerre acts as a "manager of managers" with each individual manager being responsible for its own property.

Roger C. Krasnicki, vice president, is in charge of making property investments.

Lisa A. Fisher, investment officer and assistant secretary, is the client contact.

Chase Investors Management Corp.

1211 Avenue of the Americas, 15th floor, New York, N.Y. 10036; (212) 730-3642

Tax-exempt real estate assets	$66 million
Equity	$14 million
Hybrid debt	$52 million
Tax-exempt real estate clients	5
Total real estate assets	$1,553 million
Equity	$1,385 million
Hybrid debt	$139 million
Mortgages	$29 million

As of June 30, Chase Investors Management managed $66 million in real estate assets for five tax-exempt clients. Of that, $14.3 million was in commingled equity and $51.7 was in commingled debt.

By investment vehicle, the market value of its property holdings was $63.6 million; $11.9 million in 100% real estate equity and $51.7 million in hybrid debt.

Of the $14.3 million in equity, $2.4 million was for contributions received but not yet invested.

Of the $1.55 billion in real estate, $1.49 billion was invested for foreign clients.

All of the tax-exempt assets are invested in existing office properties.

Chase offers an open-end commingled fund called the Chase Bank Real Estate Investment Fund as well as separate account management.

The firm mainly acquires property in regional shopping centers and well-located, first-class downtown office buildings concentrated in 12 to 14 major U.S. metropolitan areas and their suburbs.

Properties are managed by third-party local companies. Investment management personnel visit properties at least six times a year.

John S. Boynton, vice president-director of acquisitions, is in charge of making property investments. Henry W. Haynes Jr., managing director, is the client contact.

Chemical Bank

277 Park Ave., New York, N.Y., 10172; (212) 310-5011

Tax-exempt real estate assets	$27 million
Equity	$13 million
Hybrid debt	$13 million
Tax-exempt real estate clients	3
Total real estate assets	$39 million
Equity	$25 million
Hybrid debt	$13 million

As of June 30, Chemical Bank's equity real estate holdings had a market value of $13.4 million and a book value of $13.3 million. There was $2 million in debt connected with those properties.

Its hybrid-debt holdings had a market value of $13.4 million and a book value of $11 million.

All the bank's assets were in commingled equity or hybrid debt funds. It offers open-end real estate funds.

All assets were invested in existing properties. The asset mix by type of property was office, 60.5%; industrial, 20.5%; retail, 18.3%; other, 0.7%.

The current emphasis is on commercial properties in the Northeast. On a day-to-day basis, properties are managed by outside real estate management firms. Chemical Bank's Real Estate Equities Fund personnel visit each property as often as deemed necessary.

Clients include Chemical Bank Retirement Plan, Warner Lambert and Shulton.

Eric Jurist, vice president, is in charge of making property investments and is the client contact.

Chestertons USA

630 Fifth Ave., New York, N.Y. 10111; (212) 765-1540

Total real estate assets	$251 million
Equity	$145 million
Hybrid debt	$106 million

As of June 30, Chestertons USA managed $251 million in real estate assets for foreign clients.

Chestertons USA invests 70% in existing properties and 30% in development properties, concentrating on retail and industrial properties in the Northeast. Its current holdings include office buildings, shopping centers and office/warehouses.

Chestertons either retains third-party contract managers for property management or partners manage the properties on site.

James J. Brinkerhoff, president, is in charge of making property investments and is the client contact.

Citicorp Investment Management

1 Citicorp Center, 153 E. 53rd St., 15th floor, New York, N.Y. 10043; (212) 559-9332

Tax-exempt real estate assets	$774 million
Equity	$573 million
Hybrid debt	$135 million
Mortgages	$67 million
Tax-exempt real estate clients	68
Total real estate assets	$1.273 billion
Equity	$1.072 billion
Hybrid debt	$135 million
Mortgages	$67 million

As of June 30, Citicorp Investment Management managed $773.8 million in tax-exempt assets. Of that, $577.7 million was in commingled or pooled funds, and $196.1 was in direct, separate accounts for equity.

The market value of its real estate equity holdings was $540.3 million; hybrid debt, $134.5 million; and mortgages, $66.8 million. Book value was $391.9 million, $107.2 million and $63 million, respectively.

Contributions received, not invested for equity was $32.2 million.

Of the total real estate assets,

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Contact Kathryn Lindner, CPM®, Senior Vice President

$499.9 million was for foreign clients; $113.7 million of that for foreign pension funds.

The firm offers open- and closed-end funds as well as separate accounts.

All of the tax-exempt assets are invested in existing properties. The asset mix by property type is offices, 90%; individual, 10%.

Investment emphasis is on midsize shopping centers, well-leased office buildings and industrial buildings with good cash flow in larger cities with diversified economies.

Citicorp offers four commingled funds, one for equity real estate, one for hybrid debt and two for mortgage investments. The Real Estate Equity Fund is being restructured to increase cash flow and diversification of assets and will be marketed starting in the fourth quarter.

Clients include GM, Westinghouse, Ford and AT&T.

Michael Vitale, vice president, is in charge of making property investments. H. Piper Andrews Jr., vice president, is the client contact.

Coldwell Banker

533 Fremont Ave., Los Angeles, Calif. 90071; (213) 613-3491

Tax-exempt real estate assets	$592 million
Equity	$592 million
Tax-exempt real estate clients	42
Total real estate assets	$710 million
Equity	$710 million

As of June 30, the book value of Coldwell Banker's equity real estate holdings for tax-exempt clients was $519 million; market value was $577.9 million. Contributions received but not invested totaled $14 million. The properties had $55.6 million in debt connected with them.

Of the total tax-exempt assets, $430.4 million was in commingled or pooled accounts and clients; $161.5 million was in direct, separate accounts.

There are seven closed-end funds — Fund II through Fund VIII — that are limited partnerships and are now closed. They are equity funds with up to 30% development. All funds are invested except for $14 million in Fund VIII.

Coldwell Banker invests 70% of tax-exempt assets in existing properties and 30% in development properties. Asset mix by property type was 40.7% office, 22.7% retail and 36.6% industrial.

The current emphasis is on the East Coast and Midwest, with some West Coast investments, and on office, retail, industrial and research and development properties.

Coldwell Banker has in-house asset managers who supervise local managers.

Clients include North American Philips, AT&T, ITT and Dow Chemical.

Tad Jones, president, is in charge of making property investments. James G. Nugent, senior vice president, is client contact.

Continental Forest Investments Inc.

33 Bull St., Box 8969, Savannah, Ga. 31412; (912) 236-7137

Tax-exempt real estate assets	$10 million
Equity	$10 million
Tax-exempt real estate clients	1
Total real estate assets	$40 million
Equity	$40 million

Continental Forest Investment's holdings, which are entirely in timberland, had a market value of $10 million, as of June 30.

The firm emphasizes diversified timberland portfolios in the Southeast, with direct equity investments in timberland, timberland management services and timberland investment advisory services.

There is comprehensive in-house management with on-site foresters. Services include maintenance, full accounting and sales.

W.W. Herbst, executive vice president, is in charge of property investments. C.E. Bush, vice president and general manager, is client contact.

Consultants directory: Nov. 10.

Copley Real Estate Advisors

399 Boylston St., Boston, Mass. 02116; (617) 578-1200

Tax-exempt real estate assets	$2,561 million
Equity	$2,561 million
Tax-exempt real estate clients	139
Total real estate assets	$5,700 million
Equity	$5,700 million

As of June 30, the market value of Copley Real Estate's equity holdings for tax-exempt clients was $1.8 billion. There was $465.9 million in debt connected with the properties.

Contributions received but not invested were $161 million; contributions committed but not yet received were $127 million.

Commingled or pooled funds held $2.41 billion and direct, separate accounts, $148 million.

Half of the tax-exempt assets are invested in existing properties and half in development properties. The asset mix by property type was 50% industrial, 20% research and development, 20% offices and 10% other.

Copley concentrates its investment activity among 13 primary markets nationwide, focusing on industrial and research and development buildings.

Property management is usually handled by the local joint venture partner.

Copley has an open-end commingled fund, the Developmental Properties Account; a closed-end commingled fund, Copley Institutional Investors Fund, which opened in July; and Copley Investors Limited Partnership.

A substantial amount of assets under management is derived from equity investments from New England Mutual Life Insurance Co.'s general account and developmental properties account. Copley is a wholly owned subsidiary of New England Mutual Life Insurance Co.

Kevin Mahony, principal, is in charge of making property investments. John Phillips Jr., principal, is the client contact.

Corporate Property Investors

305 E. 47th St., New York, N.Y. 10017; (212) 421-8200

Tax-exempt real estate assets	$1,844 million
Equity	$1,844 million
Tax-exempt real estate clients	147
Total real estate assets	$3,050 million
Equity	$2,672 million
Mortgages	$378 million

Corporate Property Investors, a real estate investment trust, had more than $1.8 billion in tax-exempt real estate equity as of June 30. Mortgages on property in which it has equity interests accounted for an additional $184 million. The holdings had a market value of $842 million, all in equity, and $1 billion in equity in CPI partnerships.

Of its total assets, $1 billion was from foreign clients.

Corporate Property Investors invests in institutional income-producing commercial properties; 80% was in regional shopping centers. All but 2%

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510 Locust Street, St. Louis, MO 63101

of assets were invested in existing properties.

Clients include AT&T, Ford Foundation, Pennsylvania Public Employees and Yale University.

Hans C. Mautner, president, is in charge of making property investments. Warren Hamer is the client contact.

Cushman & Wakefield Realty Advisors Inc.

1166 Avenue of the Americas, New York, N.Y. 10036; (212) 841-7750

Total real estate assets	$1,600 million
Hybrid debt	$1,600 million

Cushman & Wakefield Realty Advisors had no tax-exempt clients as of June 30.

It offers separately managed accounts, real estate investment trusts, syndications, direct investment, investment and portfolio strategy consulting and asset management.

The firm's acquisitions emphasis is on office properties, particularly in downtown areas of primary cities.

The firm uses C&W Property Management where possible. In other cases, C&W's property management group coordinates and oversees activities of outside property managers.

Michael C.J. Fallon, senior vice president, is in charge of property investments and is the client contact.

d

D.A. Management Inc.

7777 Center Ave., Suite 500, Huntington Beach, Calif. 92647; (714) 891-6080

Tax-exempt real estate assets	$26 million
Equity	$4 million
Mortgages	$22 million
Tax-exempt real estate clients	2
Total real estate assets	$84 million
Equity	$34 million
Mortgages	$50 million

As of June 30, D.A. Management Inc.'s equity holdings for tax-exempt clients had a book value of $5.7 million. Its mortgage holdings had book value of $28 million.

Contributions received but not invested accounted for $4.3 million in equity and $22 million in mortgages.

All tax-exempt assets were in direct, separate accounts; 95% is invested in existing properties and 5% in development properties.

Asset mix by property type was commercial, 45%; residential, 42%; and industrial, 13%. D.A.'s current emphasis is on commercial and industrial properties in Southern California and Arizona.

All properties are managed in-house, with on-site personnel where necessary.

Clients include the San Bernardino County Employees and Orange County Employees.

Daniel M. Ardell, president, is in charge of making property investments and is the client contact.

Debenham Tewson & Chinnocks Associates

450 Park Ave., Suite 1902, New York, N.Y. 10022; (212) 758-8218

Total real estate assets	$350 million
Equity	$350 million

Debenham Tewson & Chinnocks Associates managed $350 in real estate equity for four foreign pension fund clients as of June 30.

All of the firm's investments were in existing properties. The asset mix by property type: offices, 75%; retail, 25%.

It takes an opportunistic investment approach in established demographic centers.

C.J. Wood, partner, is in charge of making property investments and is the client contact.

e

Eastdil Realty Inc.

40 W. 57th St., New York, N.Y. 10019; (212) 315-7200

Tax-exempt real estate assets	$1,307 million
Equity	$1,227 million
Hybrid debt	$65 million
Mortgages	$15 million
Tax-exempt real estate clients	10
Total real estate assets	$1,480 million
Equity	$1,400 million
Hybrid debt	$65 million
Mortgages	$15 million

As of June 30, Eastdil Realty's equity holdings for tax-exempt clients had a book value of $1.03 billion and a market value of $1.17 billion. Hybrid debt had book value of $58.8 million and market value of $64.9 million; mortgages had a value of $15.9 million and $15.1 million, respectively.

There was $20.2 million in debt connected with equity properties.

Contributions committed but not received for pure equity investments amounted to $60.3 million.

All of the mortgage and hybrid debt holdings and $1.2 billion of the equity assets are in direct, separate accounts. The remaining $27 million in equities is in a pooled account.

Eastdil Corporate Partners, a closed-end limited partnership, acquires general-purpose corporate real estate and leases it back to the corporate seller. ECP also acquires a small equity position in the seller in the form of stock, warrants or revenue participation.

The firm invests 95% in existing properties and 5% in development properties.

Eastdil asset managers visit properties monthly. Management is provided by venture partners, local specialists or Eastdil personnel.

Clients include AT&T and the California State Teachers.

Robert T. Davis, executive vice president, is in charge of making property investments. Donald E. Conover, vice president, is the client contact.

Top 10 real estate managers ranked by new business ($ millions)

	Firm	New business
1.	Richard Ellis Inc.	$1,020
2.	Balcor Institutional Realty Advisors	985
3.	Aetna Life & Casualty	843
4.	JMB Institutional Realty Corp.	710
5.	Equitable Real Estate Investment Mgmt.	641
6.	Heitman Advisory Corp.	611
7.	F.I.A. Associates	492
8.	NCNB National Bank	440
9.	Boston Co. Real Estate Counsel	400
10.	TCW Realty Advisors	396

Richard Ellis Inc.

350 Park Ave., New York, N.Y. 10022; (212) 355-4810

Tax-exempt real estate assets	$642 million
Equity	$544 million
Hybrid debt	$98 million
Tax-exempt real estate clients	3
Total real estate assets	$2,146 million
Equity	$1,921 million
Hybrid debt	$225 million

As of June 30, Richard Ellis Inc. managed $642 million in tax-exempt assets: $544 million in equity, of which $240 million was for contributions committed but not yet received; and $98 million in hybrid debt, of which $50 million was not yet received.

The equity holdings had a market value of $304 million and a book value of $261 million. The market value of the hybrid debt was $48 million and the book value, $41 million. There was $130 million in debt connected with the equity holdings.

All assets were in direct, separate accounts for one public and two corporate funds.

Of the total under management, $1.5 billion was for foreign clients — $1.3 billion for foreign pension funds.

The tax-exempt assets are invested 88% in existing properties and 12% in developmental properties.

The tax-exempt asset mix by property type is 66% office buildings, 30% in regional malls and retail and 4% in industrial/research and development.

The firm offers tailored, individually managed separate accounts and advisory relationships.

Managers focus on major office buildings and regional malls in areas characterized by sustained economic growth found in conjunction with constraints on the development of competing properties.

It manages property through its affiliated property management company or through a strong, local property management company. Asset managers supervise the on-site manager through regular visits and the budget process.

Clients include San Bernardino County, Bell Operating, St. Paul Insurance and Dutch Shell Retirement.

Christopher D. Budden, president, is in charge of property investments. David R. Hodes, vice president, is the client contact.

Equitable Real Estate Investment Management

787 Seventh Ave., 46th floor, New York, N.Y. 10019; (212) 554-4213

Tax-exempt real estate assets	$5,521 million
Equity	$5,222 million
Hybrid debt	$256 million
Mortgages	$43 million
Tax-exempt real estate clients	262
Total real estate assets	$23,568 million
Equity	$12,695 million
Hybrid debt	$2,618 million
Mortgages	$8,256 million

Equitable Real Estate Investment Management Inc. had $5.52 billion in tax-exempt assets under management June 30.

Of the $5.2 billion in 100% equity $167 million was in contributions committed but not yet received, and $149 million was in contributions received but not invested. Market value of the equity holdings was $4.9 billion, and book value, $3.2 billion. There was $355 million in debt connected with the equity holdings.

Of the $5.2 billion in equity, commingled or pooled funds accounted for $3.8 billion of the equity assets; $1.4 billion was in direct, separate accounts.

The hybrid debt assets, with market value of $256 million and book value of $253 million, were divided $235 million in commingled funds and $21 million in direct accounts. Of the $43 million in mortgages, $12 million was in commingled or pooled accounts and $31 million in direct, separate accounts.

There are 256 clients in commingled or pooled funds and six clients for direct accounts, representing corporate, public and union retirement systems.

Of the tax-exempt assets invested, 98% are in existing properties and 2% are in development properties. Asset mix by property type was 36.2% office, 19.4% industrial, 37.5% retail, 6.7% hotels and 0.2% specialized.

Of the total under management, $1.1 billion was for foreign clients.

Equitable offers open- and closed-end real estate funds and direct separate account investment management. Acquisition strategy focuses on properties with excellent long-term growth potential, such as well-located center city office buildings, regional shopping centers, select neighborhood centers and industrial properties.

The firm uses in-house managers as well as outside agents to manage the funds' properties. Each regional property manager oversees the management of all of the properties in his region, both agent-managed and in-house managed properties.

The Equitable Prime Property Fund, an open-end commingled fund with net assets totaling $2.9 billion June 30, emphasizes long-term investments in income-producing office, industrial, retail, hotel and specialized properties. Various investment structures are used, including wholly owned purchases, joint ventures, forward commitments and construction loans in connection with a forward commitment or within a joint venture.

The closed-end New Properties Fund (Account 16), with assets of $43 million on June 30, is a series of funds designed to meet specific client requirements. Each takes an opportunistic approach to the market.

Clients include Exxon, Florida, Westinghouse and North American Phillips.

George R. Puskar, president and chief operating officer, is in charge of property investments. Joyce R. Frater, senior vice president, is client contact.

Equitec Institutional Realty Advisers Inc.

7677 Oakport St., Oakland, Calif. 94614; (415) 430-9900

Tax-exempt real estate assets	$106 million
Equity	$106 million
Tax-exempt real estate clients	1
Total real estate assets	$1,500 million
Equity	$1,500 million

As of June 30, Equitec's $106 million in 100% equity real estate holdings had a market value of $55 million and book value of $52 million. Contributions received but not invested accounted for $50 million of the total and contributions committed but not yet received, $1 million.

There was $8 million in debt connected with the properties.

Commingled or pooled accounts held $86 million and direct, separate accounts, $20 million.

All of the tax-exempt assets are invested in existing properties, with an emphasis on fully leased office buildings in major urban areas. Properties are managed by on-site, in-house employees.

Equitec Institutional three commin

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gled funds are: Equitec Institutional Real Estate Fund, Fund II and Fund III. The first two are limited partnerships investing primarily in income-producing real estate. Fund III, a group trust, opened July 1.

Clients include Outboard Marine, Houston Municipal Employees and Illinois Power.

Marsden S. Cason, chairman and chief executive officer; Kenneth E. Nitzberg, president; and Russell M. McDonald, chairman, Equitec Properties Co., are in charge of making property investments.

Don Jackson, vice president of Equitec Institutional Realty, is the client contact.

f

F.I.A. Associates

1601 Response Road, Suite 300, Sacramento, Calif. 95815; (916) 920-4051

Tax-exempt real estate assets	$2,269 million
Equity	$834 million
Mortgages	$1,435 million
Tax-exempt real estate clients	5
Total real estate assets	$2,269 million
Equity	$834 million
Hybrid debt	$1,435 million

As of June 30, the holdings of F.I.A. Associates, a MeraBank company, had a book value of $1.6 billion and a market value of $1.7 billion, including hybrid debt.

Contributions received but not yet invested totaled $6 million, and contributions committed but not yet received were $492 million, including $305 million in hybrid debt.

Two commingled funds accounted for $119 million, $106 million in equity and $13 million in hybrid debt; and there was $2.1 billion in separate accounts, $728 million in equity and $1.4 billion in hybrid debt.

All tax-exempt assets are invested in existing properties. Asset mix by property type: industrial, 12%; office buildings, 60%; shopping centers/retail, 17%; apartments, 1%; mixed use, 8%; and hotels, 2%. Its acquisition strategy has a western concentration.

F.I.A. uses local property management exclusively, attempting to secure the best local organization. In-house asset managers closely monitor the property managers and inspect the properties on a regular basis.

The firm offers two closed-end funds and separate account management.

Profile Fund I is a $90 million fund with four participants. Profile Fund II is an open-end fund to which $29 million was committed by three participants as of June 30.

The type of properties involved in the Profile Funds include office buildings, industrial, shopping centers, multifamily residential and possibly hotels on a selective basis. Properties will be nationwide with a concerted effort to invest up to 50% of the amount committed by a major participant in the participant's home state at the client's option. Properties may be wholly owned or a joint venture and will range in size from $3 million to $18 million. Most properties will be acquired for cash. Leverage may be used in the form of taking over existing debt.

Clients include the retirement systems of the California public employees, Illinois teachers, Texas teachers and Utah.

Norm LaMar, executive vice president-acquisition department, and Stephen A. Rosenthal, vice president-acquisition department, are in charge of property investments. James L. Sublett and David L. Bonuccelli, senior executive vice presidents, are client contacts.

First Asset Realty Advisors

First Bank Place East, Minneapolis, Minn. 55480; (612) 370-4729

Tax-exempt real estate assets	$61 million
Equity	$61 million
Tax-exempt real estate clients	14
Total real estate assets	$61 million
Equity	$61 million

As of June 30, First Asset Realty Advisors had $61.3 million invested in 100% equity real estate for tax-exempt clients. The book value was $40.6 million; market value was $47.9 million. The amount of debt connected with the properties was $11.1 million.

Contributions received but not invested totaled $11.8 million, and contributions committed but not yet received totaled $1.6 million.

All tax-exempt real estate assets were in commingled or pooled funds for 14 corporate clients.

All tax-exempt assets were invested in existing properties.

The asset mix by property type was 83% retail and 17% office properties, with a focus on existing shopping centers in the Southeast and Midwest.

The firm has a "value-added" management style that often includes physical renovations. Center Cos. is used for property management.

First Asset offers open-end real estate funds and separate account management.

First Asset Real Estate Equity Fund is a collective fund that invests in shopping centers, office buildings and industrial properties nationwide. The current strategy is to select those properties with income stream and values that can be enhanced by aggressive management and the selective use of additional capital improvements.

Clients include First Bank System, Hormel, Pillsbury and General Mills.

Dennis Gethmann, director of acquisitions, is in charge of making property investments. Charles S. Ingwalson, president, is client contact.

First Chicago Investment Advisors

3 First National Plaza, Chicago, Ill. 60670; (312) 732-9708

Tax-exempt real estate assets	$921 million
Equity	$921 million
Tax-exempt real estate clients	131
Total real estate assets	$976 million
Equity	$976 million

As of June 30, First Chicago's equity holdings had a book value of $693.1 million and a market value of $808.5 million. There was $14.9 million in debt connected with the properties.

Contributions received but not yet invested totaled $18 million, and there was $96 million in contributions committed but not received.

Of the $921 million in tax-exempt assets, $852.2 million was in commingled or pooled funds for 130 clients, and $68.8 million was in a direct, separate account for one client.

First Chicago also manages $55.3 million for foreign clients.

First Chicago offers open- and closed-end real estate funds and direct separate account investment management.

All of its tax-exempt assets were invested in existing properties. Asset mix by property type was 39% office, 20% residential, 22% industrial and 19% retail.

The acquisition emphasis is on community-sized retail centers, luxury apartments in mature markets and select industrial properties.

Real Estate Fund F, with $506 million invested for 121 clients, inve
only in general purpose real estate
the upper end of the quality scale
focuses on total ownership positio
The open-end fund invests alm
exclusively in existing and leased pr
erties. Strategic diversification by t
geographic area and property type
maintained.

The First Apartment Fund invest
multitenant residential properti
Properties primarily are fully built
leased and wholly owned by the fu
Leverage may be used on own
properties, and the fund also
make forward commitments for par
pating or convertible mortgag
Emphasis is on the Sun Belt, altho
properties are located nationwide.

With the exception of Fund F's
gle-tenant properties under net leas
the management of properties is c
tracted to local property managem
firms. The on-site property manag
are responsible for all aspects of d
operations, and the firm's prope
managers monitor these activities.

Plans for the coming year includ

IF YOU ARE NOT IN REAL ESTATE, LET US INTRODUCE YOU.

IF YOU ARE, WE CAN HELP YOU DO IT BETTER.

First Chicago Investment Advisors (FCIA) offers a comprehensive range of real estate capabilities on a nationwide basis, designed for employee benefit plan sponsors with limited real estate exposure, as well as those with extensive exposure.

For example, while our Fund F provides a core representation in real estate for over 100 plan sponsors, the First Apartment Fund allowed plan sponsors to concentrate a portion of their real estate investment on a single aspect of the market.

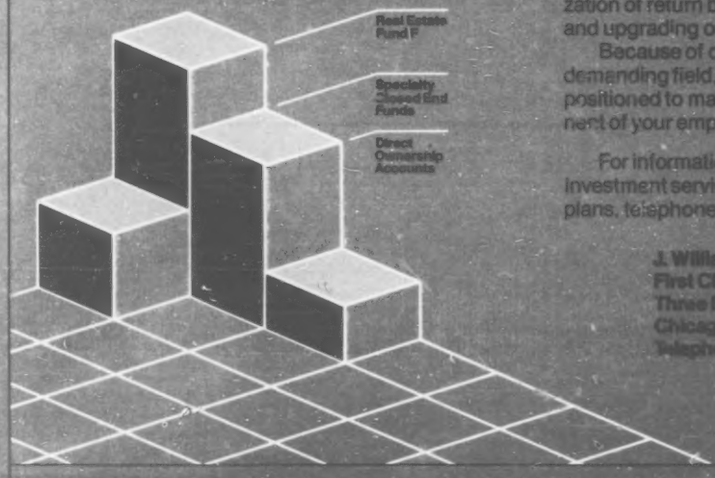
In addition to commingled real estate funds, FCIA manages accounts to reflect the specific requirements of individual clients.

As manager of more than $800 million in real estate assets, we combine practical knowledge of property acquisition, development and management with a thorough understanding of the special fiduciary needs of employee benefit plans.

Real estate can effectively add stability to an employee benefit plan's total portfolio —assuming that properties are well chosen and managed.

At FCIA, we stress long-term maximization of return by careful maintenance and upgrading of properties.

Because of our capabilities in this demanding field, we are exceptionally well positioned to manage the real estate component of your employee benefit plan's portfolio.



For information on FCIA's real estate investment services for employee benefit plans, telephone or write:

J. William Baker, Vice President
First Chicago Investment Advisors, N.A.
Three First National Plaza, Suite 0119
Chicago, Illinois 60670
Telephone: (312) 732-7941

First Chicago Investment Advisors

sed-end fund to invest in congre-e housing for the elderly. This uld be a $20 million minimum partic-tion.

Clients include General Motors, eing, Navistar and Caterpillar.

David A. Schwartz, vice president d acquisitions unit head, is in charge naking property investments. J. Wil-n Baker, vice president and product nager, is the client contact.

rst National Bank of Boston

0 Federal St., 19th floor, Boston, Mass. 02110; (617) 434-0494

-exempt real estate assets	$238 million
quity	$185 million
ybrid debt	$53 million
-exempt real estate clients	185
l real estate assets	$238 million
quity	$185 million
ybrid debt	$53 million

As of June 30, the book value of st National Bank of Boston's real ate holdings for tax-exempt clients s $168.9 million in equity and $50 lion in hybrid debt; market value s $148.3 million and $53.4 million pectively.

Contributions received but not ested totaled $36.9 million in equity. ere was $2.5 million in debt con-cted with the equity properties.

Of the assets invested in pure uity, $171 million was in commingled ooled funds and $14 million was in ect, separate accounts. Of the rid debt, $44 million was in com-gled or pooled funds and $9 million irect, separate accounts.

All tax-exempt assets were invested existing properties. The asset mix by perty type was 32% retail, 48% ce, 2% industrial and 18% research l development.

The current emphasis on acquisi-ns is on broad-based geographical l property type diversification.

s Pooled Real Estate Investment nd is an open-end fund that invests completed and substantially built perties. Forward commitments are ed upon completion and lease-up. rchases may be structured in vari-ous formats, and acquisitions are primarily in the $5 million to $20 million range. The fund generally makes investments on an all-cash basis, but also will use existing debt on a property.

On-site property management is either contracted to local firms or to the joint venture partner. The on-site manager is responsible for the daily operations of the property, monthly income and expense reports and lease negotiations. The bank oversees the on-site managers, prepares the annual budget and approves all leases. Quarterly, the real estate committee reviews the status of all properties, including all major leases and capital expenditures.

In the coming year, the bank plans to open the Northeast Real Estate Investment Fund, for investment in the Northeast.

Thomas Lunny, director-real estate investments, is in charge of making property investments. Derek J. Cavanaugh, director-real estate investments, is client contact.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., P.O. Box 2044, Milwaukee, Wis. 53201; (414) 765-4844

Tax-exempt real estate assets	$7 million
Equity	$7 million
Tax-exempt real estate clients	35
Total real estate assets	$20 million
Equity	$20 million

As of June 30, First Wisconsin Trust Co. managed $7 million in equity real estate for 35 tax-exempt clients.

Of the total, $2.7 million was in contributions received but not invested and $193 million was in contributions committed but not received. The firm's holdings had a market value of $4.2 million and a book value of $4.1 million.

All assets were in commingled funds and invested in existing properties.

First Wisconsin Trust invests in nonresidential income properties in the Midwest. The single-tenant properties are managed in-house; outside managers are hired for multitenant properties. Both groups are monitored in-house.

Earl D. Lillydahl is in charge of making property investments and is the client contact.

Forest Investment Associates

11 Piedmont Center, 3495 Piedmont Road, Suite 404, Atlanta, Ga. 30305; (404) 239-0986

Tax-exempt real estate clients	1

Forest Investment Associates managed one direct, separate, equity timberland account for a U.S. tax-exempt client as of June 30. The firm did not disclose the amount of assets managed.

It invests in pine timberland in the Southeast. In-house personnel make all management decisions and supervise the forest management companies hired for field services. At least four on-site inspections are done each year.

Charles M. Tarver, principal, is in charge of making property investments. David S. Graham, principal, is the client contact.

g

Goldman, Sachs & Co.

85 Broad St., New York, N.Y. 10004; (212) 902-5648

Tax-exempt real estate assets	$366 million
Equity	$366 million
Tax-exempt real estate clients	16
Total real estate assets	$636 million
Equity	$636 million

As of June 30, the book value of Goldman, Sachs & Co.'s equity real estate holdings for tax-exempt clients was $288.7 million. Market value was $366 million. There was $16.5 million in debt connected with the properties.

Of the tax-exempt assets, $198.5 million was in commingled accounts and $167.5 million was in direct, separate accounts.

The firm invests only in existing properties. The asset mix by property type was office, 75%; retail, 10%; hotel, 10%; and warehouse/other, 5%.

It looks for office, warehouse and retail properties nationwide. Property management is done through local and regional firms.

The firm's commingled fund is called Institutional Property Assets.

Paul D. Rubacha, vice president, is in charge of making property investments. Thomas Morgan, associate, is the client contact.

Grubb & Ellis Investment Advisors Inc.

1333 Broadway, Suite 900, Oakland, Calif. 94612; (415) 839-9600

Tax-exempt real estate assets	$240 million
Equity	$203 million
Mortgages	$37 million
Tax-exempt real estate clients	4
Total real estate assets	$2,412 million
Equity	$1,375 million
Mortgages	$37 million

As of June 30, Grubb & Ellis' equity holdings for tax-exempt clients had a market value of $160.7 million and a book value of $159.5 million. There was $15.5 million in debt connected with those properties. Contributions committed but not yet received accounted for $42 million.

All the tax-exempt assets were in direct, separate accounts; 99% is in existing properties and 1% in development properties.

The asset mix by property type was research and development, 95%; industrial, 2%; and offices, 3%.

Clients include Kern County Employees and San Diego Electrical Pension Trust.

James Proud, president, is in charge of making property investments and is the client contact.

The institutional brokerage survey runs Sept. 29.

Top 10 real estate managers ranked by tax-exempt assets in mortgages ($ millions)

	Firm	Mortgages
1.	Aetna Life & Casualty	$12,187
2.	Manufacturers Hanover Invest.	585
3.	Lomas & Nettleton Co.	507
4.	Wells Fargo Realty Advisers	313
5.	L.J. Melody & Co.	312
6.	Prudential Realty Group	310
7.	Scudder Realty Advisors Inc.	280
8.	Union Labor Life Insurance	223
9.	Karsten Institutional Realty Advisors	194
10.	Am Cal Co.	164

h

John Hancock Financial Services

John Hancock Place, T-49, P.O. Box 111, Boston, Mass. 02117; (617) 421-3626

Tax-exempt real estate assets	$838 million
Equity	$838 million
Tax-exempt real estate clients	76
Total real estate assets	$10,213 million
Equity	$1,834 million
Mortgages	$8,279 million

As of June 30, John Hancock Financial Services managed $837.7 million in real estate equity for tax-exempt clients; $120 million was in contributions committed but not received. Property holdings had a book value of $633.3 million and a market value of $717.7 million.

Of the tax-exempt assets managed, $787.7 were in commingled funds for 75 clients and $50 million was in a direct, separate account for one client.

John Hancock's investments, all in existing properties, were broken down as follows: industrial/warehouse, 22%; office/showroom/research and development, 12%; office, 34%; retail, 8%; hotels, 3%; apartments, 14%; and timber/agricultural, 7%.

John Hancock offers six commingled funds.

The Equity Real Estate Account (ERA) is an open-end equity account with a value of $629 million and 64 institutional investors. The properties are diversified by type and location, ranging from $1 million to $50 million. Current withdrawal requests inhibit John Hancock's ability to acquire new properties for the next several quarters.

The Specialty Real Estate Account (SERA-1) is a closed-end equity account invested solely in multifamily residential property in the West and Midwest ranging from $1 million to $20 million. Its market value June 30 was $36 million; there are five institutional participants.

The Agricultural Capital and Real Estate Fund (ACRE) is an open-end account with a market value of $35 million and eight institutional investors. It is invested 44% in farmland, 20% in timberland and 36% in mortgages and short-term instruments.

ForesTree One and Two are closed-end funds investing in timberland. ForesTree One has properties in the Southeast and Pacific Northwest ranging from $1 million to $10 million. All properties are owned by the fund. It has a market value of $17.5 million, with five institutional investors.

ForesTree Two, now open to investors, invests primarily in high-quality, industrial-grade commercial softwood timber, including direct ownership of timber and land, with mineral rights when possible. Its holdings are geographically diversified, with about 80% in the Southeast and Pacific Northwest.

The group is characterized by active management at portfolio and operational levels utilizing intensive forest management practices where economerty management is performed by outside, local forestry consulting firms.

The Apartment Fund Limited Partnership invests solely in residential, multifamily rental housing in the Northern tier. Investments range between $5 million and $20 million, and are a combination of joint ventures and unleveraged equity ownership. Current emphasis in the Apartment Fund is on garden apartments in major metropolitan areas.

With the exception of some net leased properties which are managed internally, on-site property management is either contracted to local property managers or is the responsibility of a joint venture partner. Hancock's asset management professionals are responsible for overseeing the on-site manager, preparing the annual budget and inspecting each property at least once each quarter.

Clients include The World Bank, Pennsylvania, Shell Oil and Hallmark.

John M. Lord is in charge of making timber investments; Kevin McGuire is in charge of making commercial real estate investments.

Thomas J. Mizo is the client contact for the commercial real estate area; Richard N. Smith is the client contact for timber real estate.

Harris Trust and Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-6346

Tax-exempt real estate assets	$20 million
Equity	$18 million
Hybrid debt	$2 million
Tax-exempt real estate clients	131
Total real estate assets	$20 million
Equity	$18 million
Hybrid debt	$2 million

As of June 30, the book value of tax-exempt equity real estate holdings by Harris Trust and Savings Bank was $11.9 million. Market value was $12.6 million. Hybrid debt book value was $2 million, with a market value of $2.1 million.

Contributions received but not invested for equity real estate totaled $3.7 million; contributions committed but not yet received totaled $1.4 million.

Investments of Harris Trust's Income Property Fund are equity oriented and all cash, in the $1 million to $3 million range. Emphasis in the open-end fund is on quality, with current vacancy rate less than 3%. The bank seeks to maintain and improve each property as much as possible without incurring significant development risk. Investments are located in a few widely diversified cities.

All tax-exempt assets were invested in existing properties.

The property mix was industrial, 57%; retail, 29%; and office, 14%.

Net leased properties are managed in-house. Others are managed by outside agents. A property is visited four to six times per year.

John K. Rutledge, vice president and director of trust real estate investment management, is in charge of making property investments and is the client contact.

Hayden, Tolzmann & Associates Inc.

1 Regency Drive, P.O. Drawer 708, Bloomfield, Conn. 06002-0708;

State Street Bank and Trust Company *and* Aldrich, Eastman & Waltch, Inc.,
Manager and Trustee *Real Estate Advisor*

are pleased to announce

STATE STREET REAL ESTATE FUND IV

has been funded with

$90,000,000

Real Estate Fund V is currently available for subscriptions.

StateStreet

225 Franklin Street, Boston, Massachusetts 02110 617-654-3236

Tax-exempt real estate assets ..... $36 million
Equity ..... $36 million
Tax-exempt real estate clients 1
Total real estate assets ..... $36 million
Equity ..... $36 million

As of June 30, the book value of holdings for tax-exempt clients by Hayden, Tolzmann & Associates Inc., formerly Hayden Associates Inc., was $23.7 million; market value was $36.3 million. The was $6 million in debt connected with the equity properties. All the assets were in one direct, separate account.

All of the tax-exempt assets are in existing properties. The asset mix was 45.5% office; 30.5% industrial; and 24% retail.

Current emphasis is on mixed-use, research and development, office, industrial and retail properties nationwide. All are managed on-site by local firms.

The tax-exempt client is the New Hampshire Retirement System.

David C. Tolzmann, president, is in charge of making property investments and is the client contact.

Heitman Advisory Corp.

180 N. LaSalle St., Chicago, Ill. 60601; (312) 855-5700

Tax-exempt real estate assets ..... $2,918 million
Equity ..... $2,918 million
Tax-exempt real estate clients 28
Total real estate assets ..... $3,189 million
Equity ..... $3,189 million

Heitman Advisory Corp.'s equity holdings had a book value of $1.78 billion, as of June 30 and a market value of $2.15 billion. Contributions received but not invested totaled $142 million; contributions committed but not yet received were $627 million.

Commingled or pooled funds accounted for $511.5 million of the total tax-exempt assets. Seventeen tax-exempt clients invest in commingled funds. Direct, separate accounts for 11 tax-exempt clients accounted for $2.4 billion.

A total of $247 million was invested for foreign pension funds.

All of the U.S. tax-exempt assets were invested in existing properties, with 21% in shopping centers; 10%, industrial parks; 39%, office buildings; 30%, mixed use.

There are four commingled funds. Heitman Real Estate Funds I, II and III are closed-end group trusts that hold geographically diversified portfolios of between eight and 12 income-producing commercial properties, including shopping centers, office buildings and industrial parks.

Heitman Property Recovery Opportunity Partners I is a new limited partnership formed to take advantage of overbuilt market conditions in many major metropolitan areas. It will seek to acquire office, industrial park, retail and other properties that may or may not be fully completed, using expertise to add value.

Heitman concentrates on purchasing equity interests in existing, first-quality, geographically diversified commercial properties, with strong attention to property management and leasing.

Heitman provides firsthand property management through a subsidiary, Centre Properties Ltd. In joint ventures, the partner may provide day-to-day on-site management, with Centre Properties providing supervision.

Clients include Los Angeles County Employees' Retirement Association, Kellogg, Southwestern Bell and Commonwealth of Massachusetts Pension Reserves Investment Management Board.

Norman Perlmutter, chairman of Heitman Financial Ltd., the parent company, is in charge of making property investments. David Glickman, president, Heitman Advisory Corp., is the client contact.

HT Investors

1 Hospital Trust Plaza, Providence, R.I. 02903; (401)278-7606

Tax-exempt real estate assets ..... $10 million

As of June 30, HT Investors managed a $9.9 million open-end real estate fund for 17 tax-exempt accounts.

The fund, Quadrant One Real Estate Fund, seeks strong current yield on competitive, leased properties, with demonstrated potential growth through income enhancement or upgraded uses during a 10-year cycle.

Dan Woolley, vice president, is in charge of making property investments. Elaine Boyd, investment assistant, is the client contact.

i

ICC Realty Advisers Inc.

56 E. Pine St., Suite 200, Orlando, Fla. 32801; (305) 841-6241

Tax-exempt real estate assets ..... $76 million
Equity ..... $6 million
Mortgages ..... $70 million
Tax-exempt real estate clients 26
Total real estate assets ..... $76 million
Equity ..... $6 million
Mortgages ..... $70 million

As of June 30, the market value of ICC Realty Advisers's equity holdings for tax-exempt clients was $6 million and the book value, $3.3 million.

Of the $70 million targeted for mortgages, $50 million is in cash and $20 million is in commitments, with cash not yet received.

Of the property holdings, 12% are in existing properties and 88% are in development properties. The asset mix by property type was office, 80%; hotel, 20%.

Clients include the IBEW Local 323 Annuity Fund.

Byron W. Gilitz, president, is in charge of making property investments and is the client contact.

j

Jacques & Kurdziel Ltd.

405 Park Ave., New York, N.Y. 10022; (212) 758-8778

Total real estate assets ..... $204 million

As of June 30, Jacques & Kurdziel Ltd. had $204 million in real estate assets under management, all of which was for foreign pension funds.

The firm invests in office and retail properties.

W. Murray Jacques and Donald M. Kurdziel are in charge of making property investments and are the client contacts.

JMB Institutional Realty

875 N. Michigan Ave., Suite 3960, Chicago, Ill. 60611; (312) 440-5000

Tax-exempt real estate assets ..... $1,777 million
Equity ..... $1,777 million
Tax-exempt real estate clients 173
Total real estate assets ..... $13,580 million
Equity ..... $13,404 million
Hybrid debt ..... $176 million

JMB Institutional Realty Corp. had $1.78 billion under management for tax-exempt clients as of June 30; $299 million was for contributions committed but not yet received and $78 million was for contributions received but not invested.

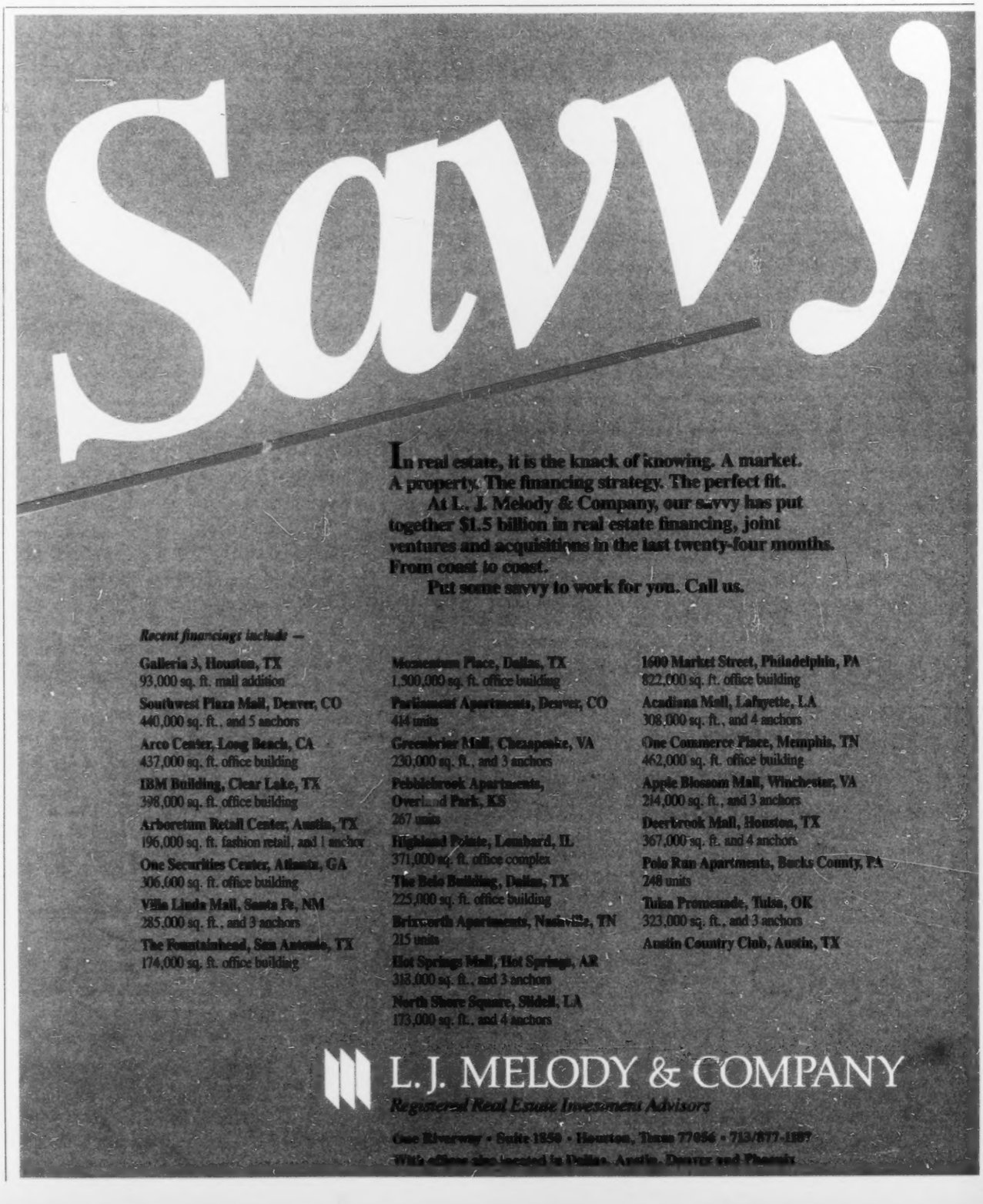
The firm's holdings had a market value of $1.4 billion and a book value of $1.2 billion. There was $224 million in debt connected with the properties.

All the tax-exempt assets were in commingled funds and all were invested in existing properties. The asset mix by property type was: retail, 52%; office, 47%; and mixed use, 1%.

JMB has four closed-end funds: Group Trusts I, II, III and IV. Group Trust IV is still open for commitments. The others each have a market value of more than $300 million.

JMB emphasizes retail properties; in-house property management, with an emphasis on adding value; and optimizing investment structures to take advantage of opportunities in inefficient markets and to meet special needs of sellers.

Clients include Iowa, Xerox, Consolidated Edison and New York State Common Retirement Fund.



erome J. Claeys III, executive vice sident of JMB Realty Corp., is in rge of making property invest- nts. John S. Lillard, president of 3 Institutional Realty, is the client tact.

nes Lang Wootton Realty dvisors

E. 52nd St., New York, N.Y. 0022; (212) 688-8181

exempt real estate assets	$900 million
uity	$620 million
brid debt	$280 million
exempt real estate clients	4
l real estate assets	$1,480 million
uity	$1,200 million
brid debt	$280 million

s of June 30, Jones Lang Wootton lty Advisors managed $900 million eal estate for tax-exempt clients. ity comprised $620 million, of ch $50 million was in contributions mitted but not yet received. he holdings had a book value of 0 million: equity was $570 million hybrid debt, $280 million. There $250 million in debt connected those properties. ll of the assets were in direct, sepa- accounts for four clients. addition, the firm invested $580 ion for foreign clients, of which 0 million was for foreign pension ds. f the tax-exempt assets, 70% was xisting properties and 30% was in elopment properties. The asset mix ype of property was: offices, 50%; pping centers, 25%; industrial, ; hotel, 5%; and residential, 5%. ones Lang Wootton takes an portunistic, value-orientation approach to acquisitions and employs its own management staff on most properties.

The tax-exempt clients are U S WEST, Pacific Telesis, Pennsylvania public school employees and USX.

John A. Weisz, Stephen J. Furnary and Frank Sullivan Jr. are in charge of making property investments. Mr. Weisz is the client contact.

K

Karsten Institutional Realty Advisors

12121 Wilshire Blvd., Suite 900, Los Angeles, Calif. 90025; (213) 826-0035

Tax-exempt real estate assets	$497 million
Equity	$231 million
Hybrid debt	$72 million
Mortgages	$194 million
Tax-exempt real estate clients	17
Total real estate assets	$767 million
Equity	$499 million
Hybrid debt	$74 million
Mortgages	$194 million

As of June 30, the book value of real estate investments held by Karsten Institutional Realty Advisors for tax-exempt clients was $211 million in equity, $72 million in hybrid debt and $194 million in mortgages. Market value was $226 million, $72 million and $194 million, respectively.

There was $24 million in debt associated with properties committed to hybrid debt.

Contributions committed but not yet received totaled $5 million in equity.

Of the total, $54 million was in commingled or pooled funds, $22 million in equity and $32 million in hybrid debt. There were nine clients. Direct, separate accounts totaled $443 million: equity, $209 million; mortgages, $194 million; and hybrid debt, $40 million. There were eight clients.

Karsten invests all tax-exempt assets in existing properties. Asset mix by property type was shopping centers, 22.5%; industrial, 27.5%; research and development, 10%; offices, 32.5%; mixed use, 2.5% and land, 5%.

Current emphasis is on equity ownership and equity-oriented mortgages, either wholly owned or joint ventures in existing properties, forward commitments and development projects. It targets retail, industrial, research and development and office buildings in large, economically diversified areas.

Supervisory property management and leasing are handled internally. On-site property management is 50% internal and 50% external. Karsten managers oversee on-site managers, and inspect properties three times a year.

It offers two commingled funds. Karsten/First Interstate Realty Fund I, a closed-end fund, is about half invested in opportunistic situations and half in longer-term situations. Properties include shopping centers, offices, industrial, and research and development properties primarily in the West and Southwest.

First Interstate Bank Ltd.'s Real Estate Equity Fund, an open-end fund, is marketed to small employee benefit trusts. The fund will buy marketable properties in areas with a good history of strong tenant demand with intent to hold long-term. Diversification through location, property type and individual characteristics is sought. The emphasis is on full equity ownership, although the trust may invest in joint ventures, intermediate and long-term loans, short-term or development loans and leveraged properties.

Clients include Ohio State Teachers, LTV, Lockheed and Nevada Public Employees.

Hugh G. Hilton, president and director of acquisitions, is in charge of making property investments. Mr. Hilton and John Lundsten, chairman, are client contacts.

Kennedy Associates Real Estate Counsel Inc.

2400 Financial Center Building, Seattle, Wash. 98161; (206) 623-4739

Tax-exempt real estate assets	$633 million
Equity	$257 million
Hybrid debt	$324 million
Mortgages	$52 million
Tax-exempt real estate clients	92
Total real estate assets	$633 million
Equity	$257 million
Hybrid debt	$324 million
Mortgages	$52 million

Kennedy Associates Real Estate Counsel Inc. had tax-exempt real estate assets totaling $633 million under management June 30. Of the $256.7 million in 100% equity, $73.9 million represented contributions received but not invested. Pure equity holdings had a market value of $182.8 million and book value of $162.4 million. There was $11.3 million in debt associated with equity properties.

Its $324.7 million in hybrid debt had market value of $142.4 million and book value of $134.9 million; $81 million represented contributions received but not invested and $101.3 million was committed but not yet received.

Commingled funds, which had 80 clients, totaled $288.6 million. Direct, separate accounts, with 12 clients, accounted for $444.5 million, including the $51.7 million mortgage investment.

Kennedy Associates offers an open-end commingled fund, direct separate account investment management and real estate investment consulting.

Of the tax-exempt assets, 5% was in development properties and 95% in existing properties. The asset mix by property type is 57.8% office; 2.9% hotel; 12.7% industrial; 4.9% retail; 18.9% office research and development; 2.3% mixed use; and 0.5% land.

The firm emphasizes acquisitions of industrial and retail properties in the Midwest, Northeast and West.

Its open-end fund, the Multi-Employer Property Trust, had a market value of $289 million as of July 1. The fund uses a broad range of investment vehicles, including equity ownership, hybrid debt/equity and sale-leasebacks.

On-site property management is provided by local firms operating within Kennedy Associates' criteria.

Clients include the Alaska Permanent Fund, Boeing Pension Trust, International Brotherhood of Painters and Allied Trades Union and Industry National Pension Fund.

Jim C. Snyder, president, is in charge of making property investments. Michael T. Oliver, vice president, is client contact.

L

Landauer Advisors Inc.

335 Madison Ave., New York, N.Y. 10017; (212) 687-2323

Tax-exempt real estate assets	$113 million
Equity	$113 million
Tax-exempt real estate clients	6
Total real estate assets	$312 million
Equity	$312 million

As of June 30, Landauer Advisors' equity holdings for tax-exempt clients had a book value of $96.7 million and market value of $113.3 million.

Of that, $38.6 million was in commingled or pooled funds and $74.7 million in direct, separate accounts.

Of its $312 million total, $199 million represented foreign pension fund assets.

All of the U.S. tax-exempt assets are invested in existing properties. The asset mix by property type was office; 84% and light industrial, 16%.

It emphasizes investment-grade retail, light industrial and office properties. The holdings are diversified nationally, with a focus on the East and South.

The firm has three closed-end group trusts. Landauer Current Income Fund opened for subscriptions July 1. It will seek 100% equity ownership in quality properties under long-term net leases to single, high-credit corporate tenants.

Landauer Momentum Fund, which also opened for subscriptions July 1, will use flexible investment structures to create a portfolio of retail, office and modern industrial properties.

Landauer Fund I, which has the same focus as the Momentum Fund, closed in 1983 and is fully invested.

Landauer takes an active and entrepreneurial approach to management, visiting each site at least four times per year. Local firms are hired for on-site management.

Clients include GM, Honeywell, British Shell and Union Carbide.

Charles H. Vaughn Jr., senior vice president, is in charge of making property investments. Kenneth Koplow, vice president, is the client contact.

LaSalle Advisors Inc.

11 S. LaSalle St., Chicago, Ill. 60603; (312) 782-5800

Tax-exempt real estate assets	$2,206 million
Equity	$2,206 million
Tax-exempt real estate clients	48
Total real estate assets	$2,206 million
Equity	$2,206 million

As of June 30, the book value of LaSalle Advisors Inc.'s equity real estate holdings for tax-exempt clients was $1.14 billion; market value was $1.25 billion. There was $348.6 million in debt connected with the properties. Contributions committed but not yet received were $959.7 million.

Of the total, $1.3 billion was in commingled or pooled funds and $900 million was in direct, separate accounts.

All tax-exempt assets are invested in existing properties such as shopping centers, industrial parks and office buildings, and the firm attempts to invest in properties of diverse type and location to minimize dependence on any specific industry, economy or geographic area. All properties are managed in-house.

LaSalle has three closed-end funds. LaSalle Street Fund Inc., with $710 million of assets, has a portfolio comprising office buildings, shopping centers and industrial parks nationwide.

LaSalle Fund II, a $290 million group trust, is closed to further subscription. The fund has acquired office buildings and a shopping center.

LaSalle Fund III is a closed-end group trust now being offered to tax-exempt employee retirement plans. The fund is targeted at $300 million and has $172.5 million subscribed.

LaSalle clients include United Airlines, Bell Atlantic and the U.S. Olympic Foundation.

Stanislaw Maliszewski is client contact.

Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs, Suite 340, Dallas, Texas 75201; (214) 855-5600

Tax-exempt real estate assets	$503 million
Equity	$503 million
Tax-exempt real estate clients	26
Total real estate assets	$1,523 million
Equity	$1,523 million

As of June 30, Lehndorff & Babson Real Estate Counsel managed $503 million in real estate equity for tax-exempt clients. Of the total, $18 million was for contributions received but not invested and $101 million was for contributions committed, but not yet

DRIVING REAL ESTATE PERFORMANCE BY CREATION OF ADDITIONAL VALUE

The real estate investment marketplace is no longer driven by the inflation and supply/demand pressures which pushed values up and made it look as though almost anybody could be a winner.

These days, to fulfill its important role in a balanced institutional investment portfolio, real estate must be approached with appropriate expectations.

The greatest opportunities lie in creation of additional value through active, intensive management and redevelopment of well-selected, under-performing properties.

"Creation of value" drives performance independent of inflation. It is the basic philosophy of Schroder Real Estate Associates in our advisory services for pension fund clients and in our specialized investment vehicles. We emphasize underperforming retail, office and light industrial properties that can respond to our active, hands-on style of ownership — refurbishment, expansion, remerchandising and other value-enhancement.

Schroder Real Estate has $1,000,000,000 in equity real estate under management, for more than 100 major pension funds, institutions and corporations as direct investors or as participants in commingled real estate vehicles. We have been advising on real estate investments since 1972 and managing for pension funds since 1975. We are an acknowledged leader in expansion and refurbishment of shopping centers and office buildings throughout the U.S. With more than 100 staff professionals in our various offices, we bring a strong in-house property and construction management and leasing capability to the creation of added value in all our investments.

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received.

The property holdings had a market value of $384 million and a book value of $225 million; $40 million in debt was connected with those properties.

Commingled or pooled funds held $60 million of the tax-exempt assets and direct, separate accounts comprised $443 million.

The firm invested $1.02 billion for foreign clients, of which $138 million was for pension funds.

Of the tax-exempt assets invested, 80% was in existing properties and 20% in development properties. Investments are primarily in retail and office properties, with each holding between 40% and 60% of assets.

It employs on-site managers who are responsible for day-to-day operations.

Its two closed-end commingled funds are the Lehndorff & Babson Property Fund and the Lehndorff & Babson Property Fund II. Both invest in scarce properties, typically either office buildings or shopping centers that are built and leased or from which the firm can obtain equivalent protection for the capital invested. It also looks for properties with opportunities for enhancement of value.

The firm plans to open a third fund after the closing of Fund II.

Clients include Atlantic Richfield, Dow Chemical, Dresser Industries and the World Bank.

Marci Fagan, executive vice president, is in charge of making property investments. James S. White, executive vice president, is the client contact.

The Lexington Co.

3 First National Plaza, Chicago, Ill. 60602; (312) 899-1900

Total real estate assets	$50 million

The Lexington Co. provides real estate investment services to institutional investors on a non-discretionary basis. Services are provided either directly to investors or on a correspondent basis to other investment managers.

The firm concentrates on commercial properties with emphasis on downtown and suburban office buildings, high-technology service centers and shopping centers. More than 50% of its business involves properties under development or rehabilitation.

Bradley A. Olsen, principal, is the client contact.

Lieberman Cos.

199 Middle Neck Road, Great Neck, N.Y. 11021; (516) 466-6565

Tax-exempt real estate assets	$110 million
Mortgages	$110 million
Total real estate assets	$110 million
Mortgages	$110 million

As of June 30, Lieberman had $110 million in mortgages under management for U.S. tax-exempt clients. Of that, $10 million was for contributions committed but not yet received.

Bruce R. Lieberman is in charge of property investments and is the client contact.

Loeb Partners Realty

521 Fifth Ave., New York, N.Y. 10175; (212) 883-0361

Tax-exempt real estate assets	$100 million
Equity	$100 million
Total real estate assets	$450 million
Equity	$450 million

As of June 30, Loeb Partners Realty had $100 million in equity real estate under management for two U.S. tax-exempt clients. All of those assets were in direct, separate equity accounts.

The firm also manages $130 million for foreign clients, of which $70 million was for foreign pension funds.

All of the U.S. tax-exempt assets are invested in existing properties. The asset mix by property type is: office buildings, 50%; shopping centers, 30%; apartments, 10%; and miscellaneous, 10%.

Loeb Partners makes real estate investments on a direct basis in existing income-producing properties and emphasizing commercial and retail sites.

It has supervisory management on all investments with some on-site management done internally and some contracted out.

Joseph S. Lesser, president, is in charge of making property investments. Gary L. Naughton, vice president, is the client contact.

The Lomas & Nettleton Co.

2001 Bryan Tower, Suite 3900, Dallas, Texas 75201; (214) 761-8298

The Lomas & Nettleton Co.'s tax-exempt real estate assets are invested in direct, separate accounts by the Lomas & Nettleton Advisory Group and in commingled or pooled funds by Lomas & Nettleton Investment Partners.

Total tax-exempt real estate assets held by the Advisory Group as of June 30 were $476.1 million, all in mortgages. Market value was $265.9 million, and contributions committed but not yet received totaled $210.1 million. There was one tax-exempt client, the Teacher Retirement System of Texas.

Investments by the Advisory Group were in office buildings, office/industrial warehouses and retail developments. The current emphasis is on institutional-quality projects nationwide.

The company is active in decisions that maximize the properties' values. Off-site visits are dictated by the size of investment, the stage of completion and the leasing status.

David A. Ridley, senior vice president, is in charge of making property investments. Richard N. Hoag, second vice president, is client contact.

Lomas & Nettleton Investment Partners has two commingled funds:

The Lomas & Nettleton Institutional Mortgage Fund Ltd. (Fund I) is a closed-end, 10-year, limited partnership that closed in 1985 with 67 clients. A total of $31 million has been raised, with $29 million committed to mortgages.

Fund II is a closed-end, 10-year, limited partnership that is open for subscription until January.

Funds I and II are structured for tax-exempt institutional investors and make investments in participating mortgage/land sale-leaseback commercial, development, geographically diverse properties. Property types include retail, office and industrial.

The contact at Investment Partners is Kenn Stearns, assistant vice president, at (214) 746-7353.

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Manufacturers Hanover Investment Corp.

600 Fifth Ave., New York, N.Y. 10020; (212) 957-0760

Tax-exempt real estate assets	$660 million
Equity	$75 million
Mortgages	$585 million
Tax-exempt real estate clients	10
Total real estate assets	$660 million
Equity	$75 million
Mortgages	$585 million

As of June 30, the book and market values of real estate holdings by Manufacturers Hanover Investment Corp. totaled $75 million in equity and $585 million in mortgages for 10 clients. All were in direct, separate accounts.

MHIC is emphasizing mortgage investments.

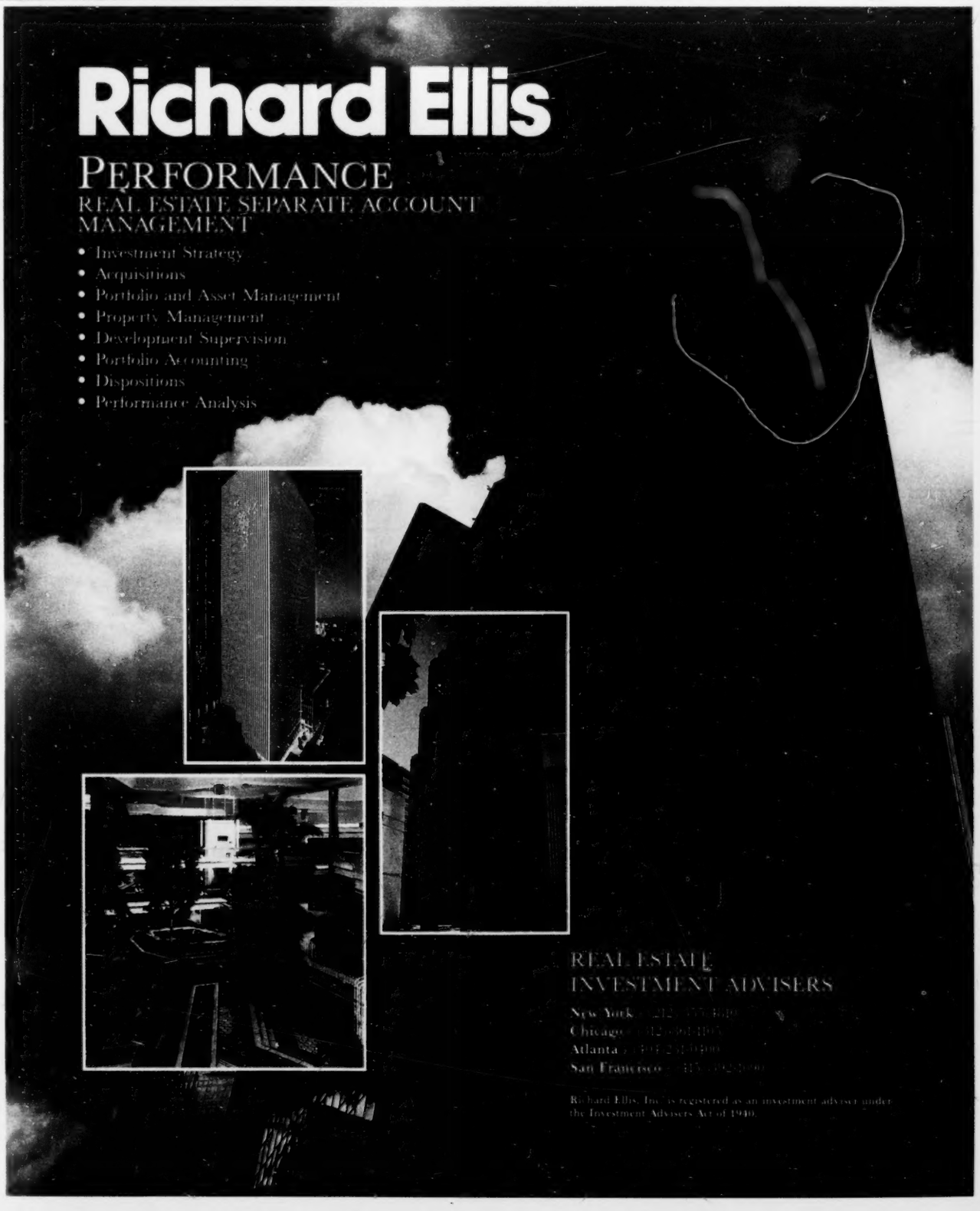
Clients include Arizona Laborers, Teamsters & Cement Masons' Pension Fund and Arizona State Carpenters Fund.

Vice Presidents William E. Miller, Phoenix, and Gary C. Morris, Los Angeles, are in charge of making property investments. Fred R. Betts, senior vice president, New York, is the client contact.

Massachusetts Mutual Life Insurance Co.

1295 State St., Springfield, Mass. 01111; (413) 788-8411

Tax-exempt real estate assets	$58 million
Equity	$58 million
Tax exempt real estate clients	50
Total real estate assets	$2,507 million
Equity	$334 million
Mortgages	$2,173 million



As of June 30, Massachusetts Mutual Life Insurance Co. managed $58 million in a commingled fund for 50 tax-exempt clients; $9.5 million represented contributions received but not invested and $5 million, contributions committed but not received.

The property holdings had a market value of $43.7 million and a book value of $37.3 million.

All tax-exempt assets were invested in existing properties, with the asset mix by property type being 29% office; 31% industrial and 40% retail.

The firm offers one open-end commingled fund, Separate Investment Account R. It seeks a baiance between income and appreciation on an aggregate basis, investing in office buildings, industrial research and development properties, retail facilities and hotel/motel properties on either a 100% ownership or joint venture basis. It takes little or no development/leasing risk, rather it seeks to create value through property improvements and aggressive leasing transactions.

The company is looking at strip-type shopping areas and multiuse light industrial properties. Management is performed by contract managers with quarterly inspection by regional staff.

Scott Noble, senior vice president, is in charge of making property investments. Peter J. Vogian, senior vice president, is the client contact.

John McMahan Associates

201 California St., Suite 400, San Francisco, Calif. 94111; (415) 433-7770

Tax-exempt real estate assets	$485 million
Equity	$471 million
Hybrid debt	$14 million
Tax-exempt real estate clients	14
Total real estate assets	$500 million
Equity	$486 million
Hybrid debt	$14 million

As of June 30, John McMahan Associates Inc. managed $484.6 million in tax-exempt real estate assets; $471 million in pure equity and $13.6 million in hybrid debt. Of the equity assets, $370 million was for contributions committed but not yet received.

The equity holdings had a book value of $103 million and a market value of $101 million; hybrid debt had a book value of $13.6 million and market value of $13.7 million.

Commingled fund held $58 million in real estate equity and $5.2 million in hybrid debt. Direct, separate accounts consisted of $413 million in equity and $8.4 million in hybrid debt.

Of McMahan's total assets, $15 million was for foreign clients.

All assets are invested in existing properties. The asset mix by property type was offices, 70%; industrial, 20%; and retail, 10%. Its current acquisition emphasis is on those properties in the West, Southwest, Northwest and Rocky Mountain regions.

It has two closed-end funds: McMahan Equity Real Estate Fund — I, which is fully invested; and McMahan Equity Real Estate Fund — II, which is open to subscription.

While on-site management may be contracted out, all leases are done centrally by senior staff.

Clients include Florida Power and Light, Honeywell, Safeway Stores and Western Airline Pilots.

Steven Brabant, vice president-acquisitions, is in charge of making property investments. Raymond Walker is the client contact.

Mellon Real Estate Investment Management

551 Madison Ave., New York, N.Y. 10022; (212) 702-4040

Tax-exempt real estate assets	$800 million
Equity	$359 million
Hybrid debt	$310 million
Mortgages	$131 million
Tax-exempt real estate clients	8
Total real estate assets	$800 million
Equity	$359 million
Hybrid debt	$310 million
Mortgages	$131 million

As of June 30, Mellon Real Estate Investment Management Corp. managed $800 million in tax-exempt real estate. Its equity holdings had a book value and market value of $330.6 million and its hybrid debt, $281.7 million. Contributions received but not invested accounted for $58.4 million in pure equity and $28.3 million in hybrid debt assets.

Of the total, $11.7 million was in commingled equity funds. Direct separate accounts held $347.3 million in pure equity, $310 million in hybrid debt and $131 million in mortgages.

All of the tax-exempt assets are invested in existing properties. The asset mix by type of property was office, 67.2%; retail, 14.7%; research and development/industrial, 8.3%; residential mortgages, 8.5%; and hotel/motel, 1.3%.

The firm offers a closed-end real estate fund, Mellon Income Property Fund I and an $86 million REIT, Mellon Participating Mortgage Trust.

Mellon Income Property Fund I, which is open for contributions until December, will take direct ownership positions, purchase leaseback positions and mortgage positions convertible into direct ownership. Properties in the $2 million to $20 million range will be emphasized. The fund is seeking investment-grade commercial and industrial real estate, such as office, warehouse, light industrial and retail properties.

Clients include Bell Atlantic, Nicor, Borg-Warner and Detroit General Retirement System.

Robert L. Kinney, president, and James T. Foran, executive vice president, are in charge of making property investments. Karin E. Shewer, vice president, is the client contact.

L.J. Melody & Co.

1 Riverway, Suite 1850, Houston, Texas 77056; (713) 877-1187

Tax-exempt real estate assets	$795 million
Hybrid debt	$483 million
Mortgages	$312 million
Tax-exempt real estate clients	4
Total real estate assets	$2,000 million
Mortgages	$1,230 million
Hybrid debt	$802 million

As of June 30, L.J. Melody & Co. managed $795 million in assets for tax-exempt clients. The holdings had a book value of $568 million; $368 million in hybrid debt and $200 million in mortgages. Contributions committed but not yet received comprised $115 million in hybrid debt and $112 million in mortgages.

All of the tax-exempt assets managed are in direct, separate accounts; 95% was invested in existing properties and 5% in development properties.

The asset mix by type of property is: office buildings, 38%, retail, 38%; industrial, 5%; multifamily housing, 10%; hotel, 9%.

L.J. Melody focuses on regional malls and existing office buildings nationwide. It uses local on-site property managers who report directly to the in-house asset management group. Staff inspects properties at least twice a year.

Teacher Retirement System of Texas is a client.

Lawrence J. Melody, president, is in charge of making property investments. Robert D. Barkley, vice president, is the client contact.

Mercantile Bank

Drawer 387, St. Louis, Mo. 63166; (314) 425-2742

Tax-exempt real estate assets	$4 million
Tax-exempt real estate clients	8
Total real estate assets	$4 million

As of June 30, Mercantile Bank managed $4.2 million in real estate investment trust stocks for U.S. tax-exempt clients in one open-end fund.

Mercantile Real Estate Fund is a pool of 15 to 20 publicly traded, exchange-listed REITs.

William H. Laird, vice president, is in charge of making property investments. Ralph Webster, vice president, is the client contact.

Metropolitan Life

1 Madison Ave., New York, N.Y. 10010; (212) 578-7368

Tax-exempt real estate assets	$500 million
Equity	$429 million
Mortgages	$71 million
Tax-exempt real estate clients	58
Total real estate assets	$17,230 million
Equity	$5,950 million
Mortgages	$11,280 million

As of June 30, the book value of Metropolitan Life's equity real estate holdings for tax-exempt clients was $304.2 million and the market value was $369.8 million. Its mortgage holdings had book value of $69.7 million and market value of $71.4 million.

Contributions received but not invested totaled $58.7 million in equity; the properties had $6.9 million in debt connected with them.

All the tax-exempt assets were invested in commingled funds.

Metropolitan offers two open-end funds, a series of closed-end funds and the Guaranteed Real Estate Contract, which is designed for public funds, endowments and foundations.

The open-end funds are: the Tower Fund, and Account RE.

Tower Fund acquires wholly owned, high-quality, strongly tenanted and well-situated existing properties in the $5 million to $15 million range. The fund emphasizes a strong buy/sell discipline and will be limited to 75 properties so that it can be actively managed. Its asset mix by property type was 23.4% office, 46.2% research and development and 30.4% shopping centers.

Account RE invests in joint ventures with national real estate developers and acquires high-quality, existing and leased properties. The size usually exceeds $30 million. Its asset mix was 70.6% offices, 6.5% warehouses, 12.4% hotels, 1.8% mixed use, 6.6% shopping centers and 2.1% land.

The closed-end funds emphasize high-quality, well-located, substantially leased income-producing properties, which are wholly owned and acquired on a cash basis. Funds are diversified geographically and by property type. Closed-End Series I, invested entirely in offices, and II, invested in offices and research and development properties, are fully subscribed. Series III is accepting contributions.

Guaranteed Real Estate Contract is indexed to specific real estate properties with an initial value of about $71 million. The properties are owned by Metropolitan and held in the general account. The indexed portfolio consists of commercial and light industrial properties that are geographically diversified.

Metropolitan takes an active, value-added approach to property management. Two groups of professionals oversee property management: its regional property management team and independent on-site managers.

Clients include American Can, Crown Zellerbach, Niagara Mohawk Power and St. Regis Paper.

Bruce Kosakowski, national director, is client contact.

J.P. Morgan Investment Management Inc.

9 W. 57th St., New York, N.Y. 10019; (212) 826-7330

Tax-exempt real estate assets	$991 million
Equity	$57 million
Hybrid debt	$778 million
Tax-exempt real estate clients	142
Total real estate assets	$1,356 million
Equity	$472 million
Hybrid debt	$728 million

Of J.P. Morgan's $991 million in tax-exempt real estate assets managed, $156 million is allocated to stock of real property ownership companies and sale-leaseback investments as of June 30.

Its equity holdings had a book value of $66 million and a market value of $57 million as of the same date. Hybrid debt holdings had values of $558 million and $646 million, respectively. There was $4 million in debt associated with both equity and hybrid debt properties.

J.P. Morgan also had $112 million in contributions received but not invested and $20 million in contributions committed but not yet received; it was not known how those assets will be divided between pure equity and hybrid debt investments.

Of the total, $849 million was in commingled or pooled funds and $142 million was in direct, separate accounts.

Of the tax-exempt assets under management, 80% was invested in existing properties and 20% in development properties. The asset mix by property type is 52% office, 41% retail, 4% industrial and 3% hotel.

It seeks high-quality properties that can effectively and efficiently compete in the market, focusing on retail and research and development properties.

A portfolio control group is formed to manage each investment, composed of the senior property manager and a senior professional from acquisitions, accounting and engineering. The property manager works jointly with and supervises the on-site manager or joint venture partner. Three or four visits are made each year.

The company offers an open-end commingled fund called The Real Estate Fund, which selects properties with above-average potential for income growth and capital appreciation. It seeks investments in development properties, older properties that can be renovated, and existing properties that will benefit from improved management. It buys primarily urban and suburban office buildings, regional and neighborhood shopping centers, and industrial/research and development buildings.

Timothy J. Heise, managing director, is in charge of making property investments and is the client contact.

Developments in defined contribution plans: Dec. 8.

MRealty Corp.

1704 Main St., Dallas, Texas 75201; (214) 698-4528

Tax-exempt real estate assets	$35 million
Equity	$30 million
Hybrid debt	5 million
Tax-exempt real estate clients	51
Total real estate assets	$100 million
Equity	$90 million
Hybrid debt	$10 million

As of June 30, MRealty Corp. managed $35.2 million in tax-exempt real estate assets. Of that, $3 million was for contributions committed but not yet received for equity investments; $6 million was for equity contributions received but not yet invested.

The firm's holdings had a market value of $26.2 million, including $5.2 million for hybrid debt, and a book value of $23.6 million, of which $5.1 million is for hybrid debt. There was $5 million in debt associated with equity properties and $5.1 million in debt connected with hybrid debt holdings.

It had total real estate assets under management of $100 million, $90 million in real estate equity and $10 million in hybrid debt.

All tax-exempt assets were invested in existing properties. The asset mix by property type is: 60% in retail centers; 20% in office/warehouses; and 20% in garden/office properties.

The firm offers two open-end funds, MTrust Real Estate Collective Investment Fund for ERISA funds and Commercial Real Estate Fund for foundations and endowments.

It emphasizes acquisitions in the Sun Belt with current cash return of 9.25% to 12% and an internal rate of return between 13% and 16%.

Active, intensive asset management is a key to its strategy. Creative improvements are made to maximize earnings. It has three internal property managers to manage the outside property and leasing management companies.

Clients include Lomas and Nettleton, Dallas-Fort Worth International Airport and MCorp.

Bruce Nozick, senior vice president, is in charge of making property investments. Mark Dunbar, vice president, is the client contact.

Mutual Benefit Life

570 Broad St., Newark, N.J. 07101; (201) 481-8000

Tax-exempt real estate assets	$27 million
Equity	$27 million
Tax-exempt real estate clients	22
Total real estate assets	$27 million
Equity	$27 million

The book value of Mutual Benefit Life's $26.6 million in equity holdings for tax-exempt clients was $14.6 million as of June 30; market value was $18.4 million. Contributions received but not invested totaled $8.8 million.

All tax-exempt assets were in direct, separate accounts for 22 clients.

All tax-exempt assets were in existing commercial and industrial properties nationwide. All properties are managed by independent property management firms. In-house personnel periodically visit all properties.

In the coming year, Mutual Benefit Life will offer a Commercial Mortgage Separate Account, consisting of portfolios of new, conventional mortgage loans originated, underwritten and serviced by Mutual. Years to maturity will vary, but typical portfolios vary from five to 15 years.

Anne Bukata, investment officer, and Stephanie L. Holowach, assistant investment officer, are in charge of making property investments. Michael K. Farrell, second vice president-group pension marketing, is the client contact.

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National Property Advisors

89 Main St., P.O. Box 308, Montpelier, Vt. 05602-0308; (802) 223-9595

Tax-exempt real estate assets	$52 million
Equity	$51 million

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Dallas, Texas • 75240 • (214) 233-8884

Hybrid debt	$1 million
Tax-exempt real estate clients	6
Total real estate assets	$226 million
Equity	$224 million
Hybrid debt	$2 million

As of June 30, National Property Advisors Corp.'s equity real estate holdings for tax-exempt clients had a market value of $43.4 million and a book value of $42.7 million.

Its hybrid debt holdings had values of $1 million and $800,000, respectively. The hybrid debt is included in a commingled fund called National Pension Property Fund I (NPPI) for two participants.

Of the $52 million in tax-exempt real estate equity, $7.6 million is in contributions committed, but not yet received. There was $3.7 million in debt connected with the equity properties.

All equity assets are in closed-end commingled accounts.

NPPI is a closed-end account that closed in September 1983. It has a market value of $38.5 million, which is 40% invested in industrial properties, 22% retail and 38% office space.

NPPII is a closed-end fund that closed in June 1985 with a market value of $36.8 million and four participants. The breakdown of the investment is 35% office space, 53% industrial and 12% land.

Of the tax-exempt assets, 99% was invested in existing properties and 1% in development properties. The asset mix by property type was industrial, 47%; office, 36%; retail, 11%; and land, 6%.

Its current emphasis is on industrial high-cube and distribution warehouses; neighborhood shopping centers; and suburban office buildings. Acquisitions are made nationwide, with a focus on the Southeast.

In most cases, on-site management is by local firms or individuals who are supervised by in-house professionals.

The closed-end commingled equity fund, NPP-III, is open for commitments.

Clients include the Vermont State and Vermont Municipal Employees retirement systems, Vermont State Teachers system and National Life Pension Plan.

Howard McCarthy, executive vice president, is in charge of making property investments. Sallie E. Proctor, vice president-director of marketing, is the client contact.

NCNB National Bank

1 NCNB Plaza TO9-1, Charlotte, N.C. 28255; (704) 374-8405

Tax-exempt real estate assets	$577 million
Equity	$577 million
Tax-exempt real estate clients	550
Total real estate assets	$577 million
Equity	$577 million

As of June 30, the book value of NCNB National Bank's holdings for tax-exempt clients was $403 million; market value was $497 million. Contributions committed but not yet received were $80 million. There was $120 million in debt associated with the properties.

Of the total, $269.5 million was in commingled or pooled funds for 544 clients. Direct, separate accounts totaled $307.5 million for six clients.

Eighty-five percent of the assets were invested in existing properties and the remainder in development properties.

There are two commingled funds. NCNB Real Estate Fund, an open-end fund, has 54 investments in 13 cities in six states. Properties include commercial, industrial, office and office-showroom facilities valued from $2 million to $10 million. Most are in office park environments throughout the Southeast.

NCNB Southern Property Fund I is a closed-end fund with investments similar to those of the Real Estate Fund. All projects will be in the South.

The asset mix by property type is office, 6%; office/industrial/warehouse/research and development, 83%; and land, 11%.

Its current acquisition emphasis is on business and office parks. Property management is contracted out, with NCNB supervising the local firms.

Clients include Ohio School Employees, Inter-American Development Bank, The World Bank and Eastern Air Lines Pilots.

Floyd Boyce, senior vice president, is in charge of making property investments. Mark S. Coltrin, vice president, is the client contact.

New England Mutual Life Insurance Co.

501 Boylston St., Boston, Mass. 02117; (617) 578-2000

Tax-exempt real estate assets	$392 million
Equity	$392 million
Tax-exempt real estate clients	130
Total real estate assets	$392 million
Equity	$392 million

General account equity real estate assets are managed by Copley Real Estate Advisors, a wholly owned subsidiary of New England Mutual Life Insurance Co.

Copley also manages New England Life's Developmental Properties Account, a commingled separate account for tax-qualified group pension funds.

The fund invests primarily in joint-venture development projects with local real estate developers. DPA is an open-end fund with 130 policyholders and a net asset value of $392 million as of June 30.

Donald I. Gregg, senior vice president-group pension marketing, is client contact.

New York Life Insurance Co.

51 Madison Ave., New York, N.Y. 10010; (212) 576-7000

Tax-exempt real estate assets	$31 million
Equity	$31 million
Tax-exempt real estate clients	7
Total real estate assets	$7.252 million
Equity	$530 million
Mortgages	$6,722 million

As of June 30, the book value of New York Life Insurance Co.'s equity real estate holdings for tax-exempt clients was $28.2 million and the market value, $27.6 million. Contributions received but not invested were $3.3 million.

All tax-exempt assets were in a commingled fund and invested in existing properties. Its asset mix by property type was 46% office, 31% research and development and 23% retail.

New York Life offers an open-end fund, Real Estate Separate Fund No. 3, to tax-exempt clients. RESA invests in existing industrial, retail, office and research and development properties in proven suburban locations.

Local property management firms are employed for day-to-day management. New York Life employees visit each property at least three times a year.

Harold K. Herzog, senior vice president, is in charge of making property investments. Thomas P. O'Connor, vice president, is the client contact.

The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

Tax-exempt real estate assets	$85 million
Equity	$85 million
Tax-exempt real estate clients	5

The book value of tax-exempt real estate equity holdings by the Northern Trust Co. as of June 30 was $76.7 million; market value was $83.6 million. Contributions committed but not yet received were $1.38 million. All tax-exempt assets were in direct, separate accounts.

It invests 90.2% of tax-exempt assets in existing properties and 9.8% in development properties. Asset mix by property type was 23.4% in office space, 66.8% in industrial property and 9.8% in other.

The current emphasis is on sale/leasebacks for large credit corporations.

For tax-exempt investors, Northern Trust manages sale/leasebacks directly. All are "triple net" leased. Inspections are made at least annually.

Edward B. Cohen, vice president, is in charge of making property investments and is the client contact.

How pension funds are investing in venture capital: Nov. 24.

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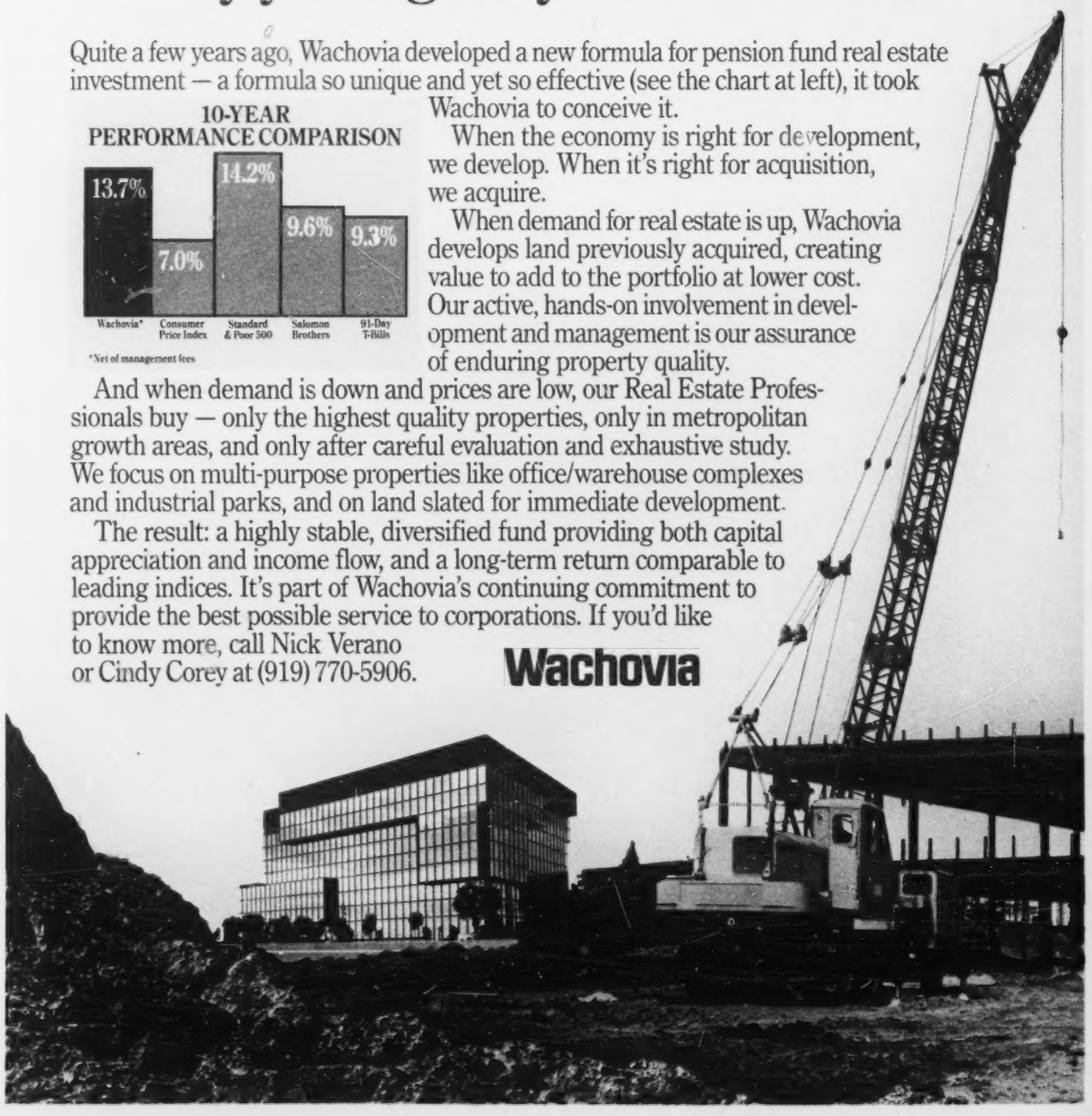
Wachovia



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The Palmieri Co.

2021 K St. N.W., Suite 700, Washington, D.C. 20006; (202) 223-8690

Tax-exempt real estate assets	$225 million
Equity	$110 million
Hybrid debt	$45 million
Mortgages	$70 million
Tax-exempt real estate clients	5
Total real estate assets managed	$1,875 million
Equity	$310 million
Hybrid debt	$45 million
Mortgages	$1,520 million

As of June 30, The Palmieri Co. managed $225 million in real estate assets for tax-exempt clients, all in commingled funds.

By asset vehicle, $110 million was in 100% equity, $45 million in hybrid debt and $70 million in mortgages.

Of the tax-exempt assets invested, 75% was in existing properties and 25% in development properties. The firm invests in all types of properties, but its current emphasis is on troubled assets.

It takes an active management approach, using independent local managers.

The Palmieri Co. offers two closed-end funds: Victor Palmieri Properties Inc., VPPI, which invests in troubled assets; and VPPI II, which invests in apartment projects.

John A. Koskinen, president, is in charge of making property investments and is the client contact.

The Peckham Boston Co.

4 Longfellow Place, Boston, Mass. 02114; (617) 523-4440

Tax-exempt real estate assets	$18 million
Equity	$18 million
Tax-exempt real estate clients	4

As of June 30, The Peckham Boston Co. managed $18 million in tax-exempt real estate equity for four tax-exempt clients.

All are direct, separate accounts fully invested in existing properties.

The firm invests in net-leased commercial and industrial properties as well as sale-leasebacks.

John M. Peckham III is in charge of making property investments.

Phoenix Mutual

1 American Row, Hartford, Conn. 06115; (203) 275-5348

Tax-exempt real estate assets	$134 million
Equity	$134 million
Tax-exempt real estate clients	134
Total real estate assets	$1,424 million
Equity	$406 million
Mortgages	$1,018 million

Phoenix Mutual's equity holdings for tax-exempt investors had a book value of $102.1 million as of June 30; market value was $119.8 million. Contributions received but not invested accounted for $14.4 million. There was $1.6 million in debt connected with the properties.

All tax-exempt assets were in one commingled account and all were invested in existing properties.

The asset mix by property type was office, 46.3%; office/warehouse, 16.6%; apartments, 21.7%; retail, 11.1%; and research and development, 4.3%.

Phoenix Mutual offers an open-end and closed-end commingled fund. The open-end Real Estate Separate Account has $134 million net assets. The closed-end CEREA I is being offered now and is open for subscription until year end. It has commitments of $30 million.

The daily on-site management of properties is contracted to outside firms. Properties are reviewed quarterly by senior management, and each property is fully appraised annually as well as updated quarterly.

Clients include Armstrong Rubber, the State of Connecticut and Virginia Supplemental Retirement System.

Chuck McMullin, vice president-real estate, is in charge of making property investments. Tom Hogan, national director-real estate, is client contact.

PMRealty Advisors Inc.

800 Newport Center Dr., Suite 300, Newport Beach, Calif. 92660; (714) 721-5000

Tax-exempt real estate assets	$323 million
Equity	$323 million
Tax-exempt real estate clients	13
Total real estate assets	$646 million
Equity	$646 million

As of June 30, book value and market value of tax-exempt real estate equity assets held by PMRealty Advisors was $75 million. There was $7 million in debt connected with the properties.

Contributions committed but not yet received totaled $248.2 million. Of the tax-exempt total, $123.3 million was in commingled or pooled funds for 12 clients and $200 million was in direct, separate accounts for one client.

All tax-exempt assets are invested in existing properties. The asset mix by property type was retail, 26%; industrial/research and development, 12%; and office, 62%. Because of the oversupply of office space, current emphasis is on retail and industrial.

PMRealty offers three closed-end group trusts. AmericaWest I invests in fully built and leased commercial properties, primarily in the West. Properties are wholly owned in the $5 million to $10 million range.

AmericaWest II invests in fully built and leased commercial properties in high-growth corridors of major metropolitan areas with an emphasis on the West and Southwest. The majority of the properties will be wholly owned, but may include some joint ownership. Properties are expected to be in the range of $5 million to $20 million and will consist primarily of retail and industrial/research and development.

PMRA III, which is open to subscription, has a focus similar to AmericaWest II, but investment will be nationwide.

All management is overseen by in-house asset managers who specialize in property types. They oversee the property managers, who are involved in the daily operation of their respective investments.

Asset managers also prepare, implement and monitor management plans and budgets; inspect properties every four weeks; and work with property managers to implement the management plan.

Outside fee managers are used, depending on the size and location of the property.

Clients include Air Products and Chemicals, Boise Cascade, Cincinnati Bell and Washington state.

Carl A. Mayer Jr., managing director, and James McWalters, senior vice president-acquisitions, are in charge of making property investments. Pete Hammer, managing director, is client contact.

Principal Mutual Life Insurance Co.

711 High St., Des Moines, Iowa 50309; (515) 247-6791

Tax-exempt real estate assets	$43 million
Equity	$43 million
Tax-exempt real estate clients	621
Total real estate assets	$7,065 million
Equity	$98 million
Mortgages	$6,967 million

As of June 30, Principal Mutual Life Insurance Co., formerly The Bankers Life, managed $42.9 million in real estate equity for tax-exempt clients, all in its open-end Real Estate Separate Account.

The account invests in office and industrial properties and shopping centers. Only existing properties producing current income are acquired. Holdings are diversified by property type and location.

The asset mix by property type is retail, 33%; office, 35%; and industrial, 32%.

Local property managers are hired, with each property visited at least four times a year.

Ray L. Hays, regional director-commercial real estate, is in charge of making property investments. Dan J. Fitzgerrell, director-pension operations, is the client contact.

Property Capital Associates

200 Clarendon St., 47th floor, Boston, Mass. 02116; (617) 536-8600

Tax-exempt real estate assets	$544 million
Equity	$544 million
Tax-exempt real estate clients	52
Total real estate assets	$660 million
Equity	$660 million

As of June 30, Property Capital Associates's equity real estate holdings for tax-exempt clients had a market value of $400 million and book value of $265 million. Of the total equity assets, $14 million was for contributions received, but not invested and $130 million was for contributions committed, but not received.

Commingled funds held $519 million and $25 million was in direct, separate accounts.

The firm invested $15 million for foreign clients, $11 million of that for pension funds.

All tax-exempt assets are invested in existing properties nationwide. The asset mix by property is: office buildings, 40%; shopping centers, 24%; hotels, 16%; apartments, 12%; and industrial, 8%.

Its Property Capital Trust, a closed-end fund, is a publicly held real estate investment trust that invests in major income-producing properties nationwide.

PCA Institutional Real Estate Partnerships is also a closed-end fund. Each partnership is formed to invest in a special property, such as an office building, shopping center or hotel.

Americana Hotels & Realty Corp. is a closed-end fund.

Staff members actively oversee joint-venture partners who typically retain property management responsibilities.

Clients include Harvard University, Howard Hughes Medical Institute and the Rockefeller Foundation.

Anthony D. Fox, director, is in charge of making property investments. Robert M. Armstrong, director, is the client contact.

Prudential Realty Group

745 Broad St., Newark, N.J. 07101; (201) 877-9298

Tax-exempt real estate assets	$6,428 million
Equity	$6,118 million
Mortgages	$310 million
Tax-exempt real estate clients	369
Total real estate assets	$33,558 million
Equity	$15,812 million
Mortgages	$17,747 million

Prudential Realty Group had $6.43 billion under management for tax-exempt clients as of June 30. Equity holdings accounted for $6.12 billion in assets, with $440.9 million accounting for contributions received but not invested and $111 million contributions committed but not yet received. The market value of the equity was $5.57 billion; there was $518.2 million in debt associated with the properties.

The market value of the mortgage holdings was $225.5 million; contributions received but not invested totaled $84.3 million.

All tax-exempt real estate assets were in commingled or pooled funds for 337 equity clients and 32 mortgage clients.

There was 98% of assets in existing properties and 2% in development properties.

Asset mix by property type is agriculture, 1%; apartment, 4%; hotel, 9%; industrial, 14%; land, 1%; office, 57%; retail, 14%.

Prudential offers several commingled funds, including PRISA, the oldest and largest commingled, broadly diversified, actively managed open-end real estate fund in the United States.

PRISA II, established in 1980, invests opportunistically in fully built and leased properties.

Two open-end commingled separate accounts for mortgages — PRIMOR and MORISA — emphasize mortgages with participation features. PRIMOR is for plans that prefer to invest in project built with union labor.

PRACE I and II are closed-end commingled accounts for investment in income-producing real property.

Properties are managed by outside managers, who are directly responsible for enhancing the value of a property during the holding period.

Clients include Campbell Soup, Los Angeles County Employees, Colorado Fire & Police and A.H. Robins.

Paul B. Firstenberg, senior vice president, is in charge of making property investments. Buck Bowen, senior vice president, is the client contact.

PSI Institutional Realty

1015 Grandview Ave., Glendale, Calif. 91201; (818) 244-8080

Tax-exempt real estate assets	$1,017 million
Equity	$1,017 million
Tax-exempt real estate clients	93
Total real estate assets	$2,057 million
Equity	$2,057 million

As of June 30, PSI Institutional Realty, a division of Public Storage

Bank of Boston
Real Estate Investment
Management

Solid performance. Real estate expertise in pension fund management, ownership and lending.

- Northeast Properties Investment Fund
- Pooled Real Estate Investment Fund
- Special Accounts

Contact:
Derek J. Cavanaugh,
Director
(617) 434-0494

Bank of Boston
Real Estate Group
100 Federal Street
Boston, MA 02110

Put our strength to work for you.

1784

BANK OF BOSTON

Inc., managed $1 billion in tax-exempt assets. The equity holdings had a book value of $564.6 million and a market value of $925.7 million.

Contributions received, but not invested, accounted for $36 million; contributions committed, but not received, accounted for $55 million.

Of the total, $955.7 million was in commingled funds for 90 clients and $61 million in direct, separate accounts for three clients.

PSI also invests $221.8 million for foreign pension clients.

The firm invests 10% in existing properties and 90% in development properties, offering closed-end funds and separate accounts.

The asset mix by property type was: 85% in acquisition and development of self-storage facilities and 15% in business parks.

Public Storage Management Inc., a subsidiary of Public Storage, manages all the properties.

It offers Public Storage Institutional Funds, a series of closed-end funds formed to acquire commercial and high-grade industrial sites and develop self-storage facilities on such sites. All deals are on an all-cash basis.

Clients include Connecticut, Ameritech, Hawaiian Electric and Eastman Kodak.

Hugh W. Horne, president of site acquisition and development, is in charge of making property investments. Nori Gerardo, senior vice president, is the client contact.

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RepublicBank Dallas

P.O. Box 241, Dallas, Texas 75221; (214) 922-5878

Tax-exempt real estate assets	$46 million
Equity	$38 million
Hybrid debt	$8 million
Tax-exempt real estate clients	53
Total real estate assets managed	$46 million
Equity	$38 million
Hybrid debt	$8 million

The book value of real estate holdings by RepublicBank Dallas for tax-exempt clients as of June 30 was $33.4 million in equity and $7.8 million in hybrid debt. Market value was $33.8 million equity and $7.8 million, hybrid debt.

Contributions received but not invested for real estate equity were $3.9 million.

All of the assets were in commingled or pooled funds for 53 clients.

Ninety-six percent of the investments was in existing properties and 4% in development properties.

The asset mix by property was office, 51%; industrial, 28%; retail, 21%.

It invests in income-producing properties through 100% ownership, acquisitions and equity-oriented convertible mortgages. The emphasis is on apartments and retail properties in second-tier cities in the southern half of the United States. Properties are valued between $3 million and $7 million.

RepublicBank Estate Equity Fund, an open-end fund, invests in properties with long-term growth potential. Assets are invested primarily in completed and leased projects with a cash flow history.

Local property is managed by in-house staff. Out-of-town properties are managed by fee agents with in-house staff approving all leases. All properties are inspected at least monthly.

Clients include TEECO, Methodist Hospital of Dallas, General Automotive and Austin Steel.

James L. Hitt, vice president and director of real estate investments, is in charge of making property investments. Vida S. Icenogle, vice president and director-investment marketing, is client contact.

T.W. Richardson & Co.

100 Pine St., Suite 1275, San Francisco, Calif. 94111; (415) 391-2880

Tax-exempt real estate assets	$9 million
Equity	$9 million
Tax-exempt real estate clients	4
Total real estate assets	$9 million
Equity	$9 million

As of June 30, the book value of equity real estate holdings for tax-exempt clients by T.W. Richardson & Co. was $6.7 million; market value was $9.19 million. There was $3.8 million in debt associated with the equity properties.

All assets were held in direct, separate accounts for four clients.

The company, which offers direct, separate accounts and partnerships, invests all of its assets in existing properties. Asset mix by property type was 40% industrial; 25% office; and 35% land. The emphasis in acquisitions is on industrial land and buildings in the South and Southwest.

The company manages all of its own properties.

Clients are Freeport Associates, Hartsfield-Atlanta 1, The Arlington Plan and Arlington-Oakport Ltd.

Thomas W. Richardson is in charge of making property investments and is the client contact.

The RREEF Funds

650 California St., Suite 1800, San Francisco, Calif. 94108; (415) 781-3300

Tax-exempt real estate assets	$2,997 million
Equity	$2,997 million
Tax-exempt real estate clients	80
Total real estate assets	$2,997 million
Equity	$2,997 million

As of June 30, the book value of holdings for tax-exempt clients of the RREEF Funds was $1.89 billion; market value was $2.4 billion. Contributions received but not invested totaled $54.1 million; contributions committed but not yet received totaled $535.8 million.

Of the tax-exempt assets invested, $2.79 billion was invested in commingled or pooled funds and $200 million was in direct, separate accounts.

RREEF offers three series of non-competing closed-end real estate funds and a limited number of separate accounts.

All investments are in existing properties. The asset mix by property was office buildings, 45%; shopping centers, 27%; industrial, 18%; business parks, 9%; and residential, 1%.

The recent emphasis has been on shopping centers and industrial properties in major metropolitan areas nationwide.

All but 5% of property management is performed in-house. About 20% of properties have on-site managers and those without are visited once a week by the district manager.

RREEF West-VII, a $125 million fund, and RREEF USA-IV, a $500 million fund, will open for subscriptions in late 1986.

Clients include AT&T, Monsanto, Connecticut and Illinois State Universities Retirement System.

The 14 acquisitions principals are in charge of making property investments. Paul Sack, principal, is the client contact.

Frank Russell Trust Co.

1201 Pacific Ave., First Interstate Plaza, Suite 1912, Tacoma, Wash. 98402; (206) 572-2282

Tax-exempt real estate assets	$160 million
Equity	$160 million
Tax-exempt real estate clients	54
Total real estate assets	$160 million
Equity	$160 million

As of June 30, Frank Russell Trust Co.'s real estate holdings for tax-exempt clients had a book value of $149.7 million and a market value of $159.6 million. All tax-exempt real estate assets were in commingled or pooled funds for 54 clients.

Its commingled fund, Real Estate Equity Fund, provides diversification by style, property type, location, value range and investment structure, using the skills, experience and strategies of a group of real estate investment organizations.

Clients include A.B. Dick, Hilton International and Policemen's Annuity and Benefit Fund of Chicago.

David A. Anderson, chief investment officer, is in charge of making property investments. Paul R. Kaltinick, president, is the client contact.

Review and outlook: Dec. 22

At NCNB, We Follow The Philosophy Of The Pharaohs.

They knew two things were critical to solid real estate investments. Quality construction and teamwork. Given the enduring results of that way of thinking, NCNB insists on it too.

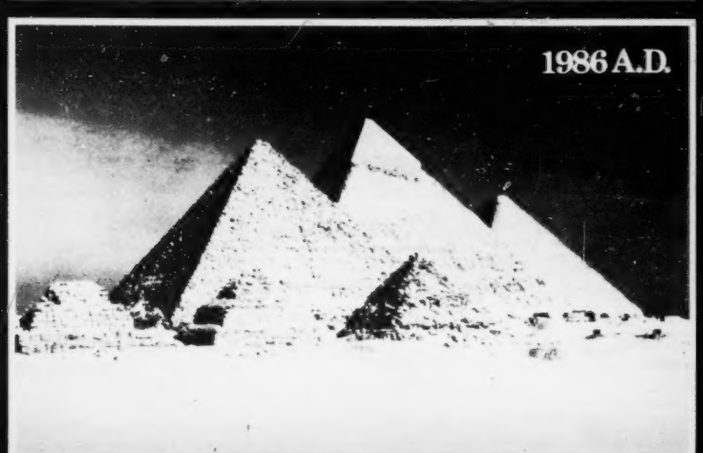
Our experienced team of development, architectural, construction, and property management specialists work exclusively with high-quality properties, located primarily in the Southeast. And our dedication to quality and teamwork has paid substantial dividends.

With consistently high returns, the NCNB Real Estate Fund has climbed to the peak of the industry in recent years. We've cemented our place at the top of the open-end fund universe with an average annual return of 16.4%* over the last five years. Our ten-year average is just as impressive.

Many real estate investments may look good in the short run, but The NCNB Real Estate Fund has passed the ultimate test...the test of time. Call Mark Coltrin, NCNB Trust Group Vice-President for details at (704) 374-8405.

*As reported by CDA Investment Technologies, Inc. for the period ending 12/31/85.

NCNB



NCNB REAL ESTATE FUND

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Fayez Sarofim & Co.

2 Houston Center, Suite 2907, Houston, Texas 77010; (713) 654-4484

Tax-exempt real estate assets	$63 million
Hybrid debt	$10 million
Mortgages	$53 million
Tax-exempt real estate clients	9
Total real estate assets	$63 million
Hybrid debt	$10 million
Mortgages	$53 million

As of the year ended June 30, Fayez Sarofim & Co. had $62.9 million in real estate investments, all for tax-exempt clients. Of the total, $52.1 million was in a commingled mortgage fund and $10.8 million was in direct, separate accounts.

The firm had $10 million in commitments not yet received for hybrid debt, and $52.9 million in mortgages. Of the mortgage assets, $7.9 million represented contributions received but not invested and $686,695 was in a cash account.

All of the tax-exempt assets were invested in existing properties. The asset mix by property type is: office buildings, 62%; industrial, 18%; retail, 13%; and service center, 7%.

The firm offers closed-end real estate funds, direct separate account investment management and real estate investment counseling.

Its closed-end fund, Sarofim Investors Realty Fund (P-I) is a participating mortgage fund with eight investors.

Fayez Sarofim & Co. emphasizes well-located office buildings, industrial and retail properties nationwide in cities with populations of more than 1 million.

It uses outside property managers.

Avon, Reader's Digest and Hughes Aircraft are among the clients.

Joshua M. Brown, vice president, is in charge of making property investments and is the client contact.

Schroder Real Estate Associates

437 Madison Ave., New York, N.Y. 10022; (212) 486-9800

Tax-exempt real estate assets	$50 million
Equity	$50 million
Tax-exempt real estate clients	1
Total real estate assets	$1,054 million
Equity	$888 million
Hybrid debt	$166 million

As of June 30, Schroder Real Estate Associates had a commitment, but had not yet received the cash, of $50 million from one U.S. tax-exempt client.

Of its $1.05 billion in total assets managed, $964 million was for foreign pension funds.

The firm offers closed-end funds and separately managed accounts.

It seeks to acquire underutilized retail, office or industrial properties nationwide that respond to its active ownership, which includes expansion, modernizing, remerchandising and other value-enhancement strategies.

Its management style is direct and active, placing its own employees at the site.

Its U.S. client is the Ohio Police & Firemen's Fund. Foreign clients include IBM (U.K.), British Shell and British Post Office & Telecommunications Workers.

Charles Grossman and Norman L. Peck, managing partners, are in charge of making property investments. John E. Emmanuel, senior vice president, is the client contact.

Scudder Realty Advisors Inc.

333 S. Hope St., 37th floor, Los Angeles, Calif. 90071; (213) 628-1144

Tax-exempt real estate assets	$440 million
Equity	$40 million
Hybrid debt	$120 million
Mortgages	$280 million
Tax-exempt real estate clients	12
Total real estate assets	$440 million
Equity	$40 million
Mortgages	$280 million
Hybrid debt	$120 million

As of June 30, all tax-exempt assets under management by Scudder Realty Advisors were in direct, separate accounts, and all were invested in existing properties.

Its holdings consisted of shopping centers, industrial, office and apartment properties nationwide.

All properties are managed by outside professionals.

Scudder has established a small-loan program — $250,000 to $2.5 million — on properties in the first through third quartile. These are fixed-rate loans on properties throughout the United States.

Clients include Sacramento County Employees, Ventura County Employees, city of San Diego Retirement System and Carpenters Pension Trust for Southern California.

Tina K. Kelly, vice president, is in charge of making property investments in the small loan program. James C. Whitten, vice president, and Robert M. Imm, assistant vice president, are in charge of making property investments in equities and hybrid debt.

Christopher B. "Kip" Davis, senior vice president, is the client contact.

Security Capital Real Estate

1290 Avenue of the Americas, New York, N.Y. 10104; (212) 408-2911

Tax-exempt real estate assets	$753 million
Equity	$753 million
Tax-exempt real estate clients	165
Total real estate assets	$1,010 million
Equity	$1,010 million

As of June 30, Security Capital Real Estate Corp. managed $752.9 million in tax-exempt equity real estate, of which $230.8 million represented contributions received but not invested and $11.8 million, contributions committed but not yet received.

The firm's holdings had a book value of $476.8 million and a market value of $511.3 million. There was $69 million in debt associated with the properties.

All tax-exempt assets were in its open-end fund, Security Capital Real Estate Fund.

The group trust purchases 100% equity interests in existing, income-producing properties in the $5 million to $25 million range. The asset mix by property type was: multifamily residential, 74%; shopping centers, 12%; office buildings, 11%; and multipurpose warehouse, 3%.

Property management is done by company employees; site inspections by senior management are conducted bimonthly.

Clients include U S WEST, K mart, Ford and Alaska.

John Streicker, president, is in charge of making property investments. Lewis W. Kresch, first vice president, is the client contact.

Southland Trust Co.

400 N. Olive, 700 Skyway Tower, Dallas, Texas 75201; (214) 969-1070

Tax-exempt real estate assets	$113 million
Equity	$113 million
Tax-exempt real estate clients	12
Total real estate assets managed	$113 million
Equity	$113 million

As of June 30, Southland Trust Co. managed $113 million in tax-exempt real estate equity assets, of which $1.2 million represented contributions received but not invested and $23.8 million represented contributions committed but not yet received.

The book value of tax-exempt real estate equity holdings was $60.9 million; market value was $88.2 million. There was $16.6 million in debt associated with the properties.

Of the total, $15.4 million was in commingled or pooled funds for 10 clients; $97.8 million was in direct, separate accounts for two clients.

Fifty-four percent of tax-exempt assets was in existing properties and 46% in development properties.

Southland invests 10% of its tax-exempt assets in office/showroom; 8% in retail; 26% in industrial; 10% in parking garages; and 46% in land development.

The Southland Real Estate Equity Fund, an open-end fund, emphasizes location and quality construction, earnings growth potential and active portfolio and property management. Properties with below-market rents are acquired for rollover in a short time. Most have excess land to allow for upgrading. The properties are 95% leased.

Properties are in Texas, North Carolina, Illinois and Kansas. Those under consideration are in California, Arizona, Georgia and the Northeast.

Managers are contracted to manage each property. Southland personnel closely review and approve all leases, remodeling and other changes.

In the coming year, an apartment fund will be initiated.

Clients include Minyard Food Stores, Optic-Electronics, Eastern Airlines Pilots and Dallas Police & Firemen.

Paul E. Dunn and Mark D. Wentz III are in charge of making property investments. Mr. Dunn, president, is the client contact.

State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 654-3236

Tax-exempt real estate assets	$329 million
Equity	$200 million
Hybrid debt	$129 million
Tax-exempt real estate clients	21
Total real estate assets	$359 million
Equity	$200 million
Hybrid debt	$159 million

The book and market values of equity holdings by State Street Bank and Trust Co. for tax-exempt clients were each $133.6 million as of June 30. Hybrid debt holdings had a book value of $92.1 million and market value of $95.5 million.

In addition, State Street had $30.3 million in contributions received but not invested and $100 million in contributions committed but not yet received from tax-exempt clients. Of that $100 million, approximately $66 million will be invested in real estate equity and $34 million in either hybrid debt or mortgages.

There was $10.7 million debt connected with the equity portion and $44.3 million in debt connected with the hybrid debt portion of the properties.

All tax-exempt assets were in four closed-end commingled or pooled funds: State Street Real Estate Fund I, II, III and IV.

State Street Bank and Aldrich, Eastman & Waltch have developed the funds with an investment philosophy based on an opportunistic, flexible approach.

Of the tax-exempt assets, 95% was in existing properties and 5% in development properties. The allocation by property type is 38% retail, 33% industrial/research and development and 29% office. The funds also may invest in warehouses, light manufacturing and distribution facilities, hotels/motels, residential and land.

Properties are acquired to ensure diversification, with each investment proposal evaluated on its own characteristics.

There are various property management arrangements, depending on investment structure and property needs. The borrower/partner often is the property manager. For fee-owned properties, an incentive-compensated manager is hired when implementing leasing or capital improvement programs. For general maintenance, State Street will consider a contract manager. All properties are visited quarterly.

Real Estate Fund V will be available for subscriptions throughout the coming year, or until $100 million is committed.

Clients include CBS, GTE, Honeywell and World Bank.

John Pattillo, principal, Aldrich, Eastman & Waltch Inc., is in charge of making property investments. Harry Sterling Jr., vice president, is client contact.

SUHRCO Real Estate Advisors Inc.

401 Parkplace, Suite 501, Kirkland, Wash. 98033; (206) 828-4464

Tax-exempt real estate assets	$88 million
Tax-exempt real estate clients	3
Total real estate assets	$108 million

SUHRCO Real Estate Advisers Inc. specializes in direct accounts on both a discretionary and non-discretionary basis, with particular emphasis on turnarounds of existing shopping centers and large office buildings.

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TCW Realty Advisors

400 S. Hope St., Suite 600, Los Angeles, Calif. 90071-2899; (213) 683-4200

Tax-exempt real estate assets	$857 million
Equity	$545 million
Hybrid debt	$312 million
Tax-exempt real estate clients	56
Total real estate assets	$857 million
Equity	$545 million
Hybrid debt	$312 million

As of June 30, the book value of the $857.4 million real estate holdings by TCW Realty Advisors for tax-exempt clients was $293.9 million in 100% equity and $301.9 million for hybrid debt; market value was $315.2 million, equity, and $312.4 million, hybrid debt. There was $26.9 million in debt associated with the equity properties.

Contributions received but not invested totaled $158.3 million for equity, and contributions committed but not yet received were $71.5 million for equity.

Of the tax-exempt total, $592 million was in commingled or pooled funds for 52 clients; $265 million was in direct, separate accounts for four clients.

TCW offers closed-end, commingled funds and direct, separate account investment management. Its five funds are TCW Realty Funds I, II, III and IV, and TCW Land Fund I. Realty Fund IV and Land Fund I are open for contributions through November 1986 and January 1987, respectively.

All tax-exempt assets were in existing properties; property mix by type was 60%, office; 27%, industrial; 13%, retail.

TCW invests in general purpose industrial, retail and office properties nationally. In-house research directs the acquisition staff to selected areas depending on market conditions and product type desired.

TCW Realty Portfolio Managers oversee local third-party, on-site managers. TCW controls all lease negotiations, capital expenditures and budgets. On-site inspections occur at least quarterly.

All properties are reviewed monthly by the TCW Operating Committee, with input from the in-house research department.

Clients include U S WEST, Rockwell, Pacific Gas & Electric and Minnesota.

Roger Schultz, senior partner and director of acquisitions, is in charge of making property investments. Bruce Ludwig, senior partner and director of marketing, is the client contact.

Third National Bank

424 Church St., 3rd floor, Nashville, Tenn. 37244; (615) 748-5479

Tax-exempt real estate assets	$25 million
Equity	$22 million
Hybrid debt	$3 million
Tax-exempt real estate clients	80
Total real estate assets	$71 million
Equity	$68 million
Hybrid debt	$3 million

As of June 30, Third National Bank had $24.8 million under management for 80 tax-exempt clients.

Of that, $21.9 million was for real estate equity and $2.9 million was in hybrid debt.

Equity contributions received, but not invested, accounted for $6.6 million of the total.

The firm's property holdings had a market value of $18.1 million: $15.2 million for equity and $2.9 million for hybrid debt. The book value was $17.3 million: $14.9 million, equity, and $2.4 million, hybrid debt.

All assets were in a commingled open-end fund.

Tax-exempt assets were invested 99% in existing properties and 1% in developmental properties. The asset mix by property type is: retail, 48.8%; office, 38.9%; warehouse, 10.7%; and land, 1.6%.

It seeks to acquire retail centers, warehouse properties and special use facilities (such as medical buildings) in the Southeast.

The bank's policy is to use local, well-respected property management firms.

Employees conduct periodic on-site inspections, the frequency of which depends on the particular situation.

Tax-exempt clients include Murray Ohio Manufacturing and Memphis Light, Water & Gas.

Steve Iler, vice president and fund manager, is in charge of making property investments. He is also the client contact

Tomlin Properties Inc.

5310 Harvest Hill Road, Suite 172, Dallas, Texas 75230; (214) 239-8041

Tax-exempt real estate assets	$21 million
Equity	$21 million
Tax-exempt real estate clients	6
Total real estate assets	$450 million
Equity	$450 million

As of June 30, the book value of the holdings for tax-exempt clients of Tomlin Properties Inc. was $4.5 million; market value was $20.5 million. All tax-exempt assets are in direct, separate accounts for six clients.

Of the total assets under management, $150 million is for foreign clients.

The firm invests in predeveloped land in Dallas, Atlanta and Phoenix.

On-site employees are used for its intensive management program to enhance value.

Dan O. Tomlin Jr., chairman of the board, is in charge of making property investments. Neil J. Johnston, executive vice president, is client contact.

The Travelers

1 Tower Square, Hartford, Conn. 06183; (203) 277-0271

Tax-exempt real estate assets	$547 million
Equity	$468 million
Mortgages	$79 million
Tax-exempt real estate clients	55
Total real estate assets	$18,294 million
Equity	$1,513 million
Mortgages	$16,781 million

As of June 30, The Travelers managed $468 million in tax-exempt equity real estate assets, of which $2.6 million represented contributions received but not invested and $50.4 million in contributions committed but not yet received.

The book value of equity holdings was $368 million and the market value, $415 million. There was $16.1 million in debt associated with the properties.

The book value of mortgages was $77.9 million and market value, $79.3 million.

Of the tax-exempt equity assets, $400.5 million was in commingled funds and $65.3 million was in direct, separate accounts. All the tax-exempt mortgage assets were in commingled funds.

All of the tax-exempt assets were invested in existing properties. The asset mix by property type is: office buildings, 60.6%; industrial/warehouse, 12.5%; commercial/shopping centers, 8.9%; timberland, 8.6%; hotels, 5.9%; and agriculture, 3.5%.

The Travelers offers several open- and closed-end funds. Separate Account R, an open-end fund that is open for contributions, invests in recently constructed, income-producing properties and in first and junior mortgages on those properties.

Separate Account T-I, a closed-end fund that is closed to contributions, invests exclusively in timberland; T-II, a closed-end fund that invests only in timberland, is open for contributions.

Separate Account ASA is a closed-end fund that is closed to contributions. It invests exclusively in income-producing agricultural properties.

Its staff of 15 professionals, in areas of its greatest property concentration, work closely with outside fee managers and leasing agents.

Clients include Maine, Consolidated Edison Co. of New York and Allied-Signal.

Leonard Green, second vice president-real estate investment department, is in charge of making property investments. B. Thomas Willison, vice president-asset management and pension services, is the client contact.

Trident/Meyer Real Estate Advisors

888 S. West St., Suite 400, Anaheim, Calif. 92802; (714) 999-6813

Tax-exempt real estate assets	$204 million
Equity	$172 million
Hybrid debt	$32 million
Tax-exempt real estate clients	5
Total real estate assets	$204 million
Equity	$172 million
Hybrid debt	$32 million

As of June 30, Trident/Meyer Real Estate Advisors had tax-exempt equity real estate assets totaling $172.4 million, of which $30 million represented contributions received but not invested and $59 million, contributions committed but not yet received.

Its equity holdings had book value of $60.2 million and market value of $83.4 million. Its hybrid debt holdings had book value of $29 million and market value of $32 million.

Its commingled or pooled funds accounted for $65 million of the equity holdings, with $107.4 million in direct, separate accounts. Its hybrid debt investments were all for commingled funds.

All investments are in existing properties; the asset mix by property type was 90% commercial and 10% office.

Trident/Meyer invests primarily in office, industrial and commercial properties.

Each of its funds has specific geographical criteria.

Public Pension Fund I, an Illinois group trust whose participants are three Chicago public pension funds, makes all investments in Illinois, primarily in office buildings, industrial properties and shopping centers. The investments for the Ohio Police and Firemen's Disability and Pension Fund are in the Midwest and West. Those made for the Kern County Employees' Retirement Association emphasize the West, but are allowed nationwide.

Property management is through Trident/Meyer's property management and leasing department, with staff members in California, Arizona, Illinois and Colorado. All lease negotiations are conducted by property managers and approved by the senior vice president of property management and leasing.

On-site outside property managers are used for some properties. Where there is in-house management, properties are visited twice monthly.

Allen W. Ralston, president and managing director, is in charge of making property investments and is the client contact.

U

The Union Labor Life Insurance Co.

111 Massachusetts Ave., Washington, D.C. 20001; (202) 682-0900

Tax-exempt real estate assets	$223 million
Mortgages	$223 million
Tax-exempt real estate clients	129
Total real estate assets	$435 million

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Funds place . . .

Continued from page 15

separate accounts within the past 12 months and reported three as of June 30, moved to fourth from seventh place in the new business list. It had $710 million in new business, of which $400 million was in direct, separate accounts.

Just among the Top 10 firms in new business for the 12 months, separate accounts comprised $3.67 billion. That is more than $1 billion more than they received in commingled new business, $2.6 billion.

Other advisers among the Top 10 in new business, their total new business and the portion represented by direct accounts were: Equitable Real Estate Investment Management Inc., New York, $641 million and $423 million; Heitman Advisory Corp., Chicago, $611 million and $300 million; F.I.A. Associates, Sacramento, Calif., $492 million and $463 million; NCNB National Bank, Charlotte, N.C., $440 million and $95 million; The Boston Company Real Estate Counsel Inc., Boston; $400 million, all in separate accounts; and TCW Realty Advisors, Los Angeles, $396 million and $180 million.

Balcor Institutional Realty Advisors Inc., Skokie, Ill., which does much of its business in real estate investment trusts or limited partnerships, was the only one of the Top 10 in most new business during the 12 months that reported no separate account business, although it does seek that business.

Five of the 10 managers — Richard Ellis, Balcor, F.I.A., NCNB and TCW — are new to the list this year.

Of the $73.3 billion total tax-exempt assets reported under management this year, direct accounts comprised $23.4 billion, or 32%.

This trend represents quite a change from the 1970s, when pension fund investment in real estate was extensively in open- and closed-end commingled funds.

A key reason behind the plunge by plan executives into direct rather than commingled investment, is control, according to real estate investors.

If a sponsor invests in a commingled fund that buys primarily office properties with no leverage, the fund's money is pretty much locked-in to that investment, explained Alan Emkin, a vice president with the consulting firm Wilshire Associates, Santa Monica, Calif.

But with a separate account, an executive might start out not wanting to use borrowed money on investments, but seeing a sharp drop in interest rates, might redirect the real estate portfolio to include leveraged investments, an option the executive cannot modify directly in a particular open or closed-end commingled fund.

Thus through a separate account, the fund executive can take advantage of changing economic conditions and tailor a real estate portfolio so it has a better fit with other investments.

The relatively rapid growth in individual accounts is being fed by large, often sophisticated pension funds, according to Mr. Emkin.

Consequently, he said, the allocation of several hundred million of dollars for direct accounts can represent part of the assets of just a few pension funds. It takes a bare minimum of $75 million to set up a separate account, and many invest several times that amount so a pension fund has enough money allocated to buy enough different properties to diversify the portfolio by property type and geographically.

Who is making such separate account investments? To a large extent, it is the large public funds — such as the Florida State Board of Administration and the California Public Employees' Retirement System — which have increased their interest in real estate, and the regional telephone companies that broke off from American Telephone & Telegraph Co., New York, according to David Hodes, a vice president with Richard Ellis Inc.

Because many of the large public funds have billions of dollars in assets, they prefer setting up separate accounts that give them more control over investments, he said. Additionally, many of the regional telephone company executives believe they have enough exposure already through their part-

Continued on page 41

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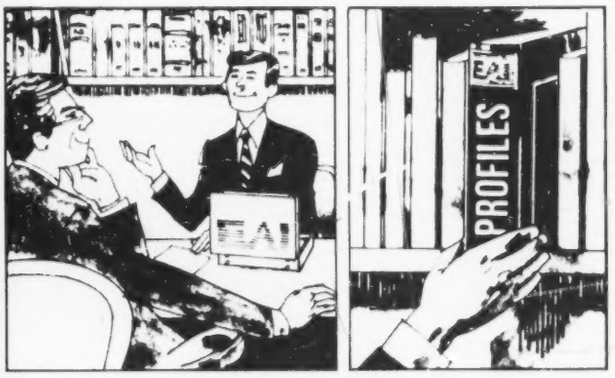

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EAI EVALUATION ASSOCIATES, INC
25 Sylvan Road South, Westport, CT 06880. (203) 226-7864

Equity ..... $212 million
Mortgages ..... $223 million

As of June 30, the book value of Union Labor Life Insurance Co.'s Pooled Mortgage Separate Account J for Jobs was $88.9 million; market value was $99.1 million. Contributions received but not invested totaled $123.6 million.

The J for Jobs account invests in long-term first mortgages on properties generally built or renovated with union labor. Location and type of properties are diversified to minimize risk.

Clients include the Laborers Union, Sheet Metal Workers, Bricklayers Union and Carpenters Union.

E.R. Saathoff, vice president-mortgages, is in charge of making property investments. John Stephan and R.C. Cassin, directors of group pension sales, are client contacts.

United Trust Fund

4770 Biscayne Blvd., Miami, Fla. 33137; (305) 576-7711

Total real estate assets ..... $220 million
Equity ..... $220 million

As of June 30, United Trust Fund had no tax-exempt clients.

It invests in sale-leasebacks of office buildings, warehouses, distribution facilities and retail facilities that are leased to a major credit tenant under a long-term net lease.

Fred Berliner, senior vice president-acquisitions, is in charge of making property investments. James Nolan, executive vice president, is the client contact.

W

Wachovia Real Estate Fund

P.O. Box 3099, Suite 1700, Winston-Salem, N.C. 27150; (919) 770-4169

Tax-exempt real estate assets ..... $627 million
Equity ..... $627 million
Tax-exempt real estate clients 320
Total real estate assets ..... $646 million
Equity ..... $646 million

As of June 30, the market value of Wachovia's equity real estate holdings for tax-exempt clients was $626.9 million. Of the total, $377 million was in commingled or pooled funds and $250 million was in direct, separate accounts.

Wachovia's asset mix by property type was 4% office, 58.7% industrial and 37.3% land.

The Wachovia Real Estate Fund is an open-end, commingled fund seeking both capital appreciation and income flow. The investment approach combines acquisition and development. Emphasis is on business parks, which include a mixed use of office, distribution, warehouse, light assembly, hotel and some retail.

On-site property management is the responsibility of the property manager working with a local developer, a manager hired on a contract basis or the joint venture partner. The bank's project managers report to the department manager and are responsible for daily contact with the on-site manager, monthly audits and all construction fund requests.

Clients include AT&T, Eli Lilly, AMP and the Newspaper Guild.

Robert Smedley, senior vice president-real estate trust department, is in charge of making property investments. Cindy Corey, marketing consultant, is the client contact.

Wells Fargo Realty Advisers

330 Washington St., Marina del Rey, Calif. 90292; (213) 822-2032

Tax-exempt real estate assets ..... $731 million
Equity ..... $232 million
Hybrid debt ..... $186 million
Mortgages ..... $313 million
Tax-exempt real estate clients 151
Total real estate assets ..... $2,692 million
Equity ..... $232 million
Hybrid debt ..... $186 million
Mortgages ..... $2,274 million

As of June 30, Wells Fargo's equity real estate holdings for tax-exempt clients had a market value of $202 million. Hybrid debt and mortgage holdings had market values of $106 million and $313 million, respectively.

Contributions received but not invested accounted for $30 million of the equity assets. The hybrid debt assets include $30 million in contributions received but not invested and $50 million in contributions committed but not yet received.

All of the equity and mortgage assets were in commingled or pooled funds. Of the hybrid debt, $136 million was in commingled or pooled funds and $50 million in direct, separate accounts.

Of Wells Fargo's $2.69 billion in total real estate assets, $43 million is for foreign pension funds.

U.S. tax-exempt real estate assets are invested 50% in existing and 50% in development properties. The asset mix by property type was retail, 55.6%; industrial, 37.6%; office, 6.8%.

Its current acquisition emphasis is on retail and industrial properties, with a focus on California.

Wells Fargo offers an open-end commingled fund, the Wells Fargo Real Estate Equity Fund. The managers emphasize development-oriented transactions and existing properties that can be upgraded, expanded or renovated. Transactions are typically structured as development joint ventures or developmental participating mortgages.

Many of the properties are managed by developer/partners.

Clients include GM, Avon Products, Ohio Public Employees and Frank Russell Trust.

Doug Hayek, director of acquisitions, is in charge of making property investments. J. Michael Johnson, director of marketing, is the client contact.

Equitable purchase

WASHINGTON — A 163,200-square-foot office complex in Fairfax County, Va., has been purchased for the $2.9 billion Equitable Real Estate Investment Management Inc.'s Prime Property Fund, an open-end commingled fund for institutional pension funds.

No price was given on the purchase.

The two-building complex is 70% leased and nearing completion.

Also, Equitable announced its Prime Property Fund, formerly called Real Estate Account 8, had a 2.3% unannualized rate of return for the second quarter.

And for the first six months of 1986, the Prime Property Fund had a 4.8% unannualized rate of return.

Wrap-up

NCNB starts fund

CHARLOTTE, N.C. — NCNB National Bank has begun a new common trust fund directed at employee benefit accounts. It is called the NCNB Employee Benefit Mortgage-Backed Securities Fund.

The mortgage-backed securities market is one of the fastest growing sectors in the credit markets, growing from $60 billion in 1980 to $300 billion today, according to bank officials.

Because of the cash flow uncertainty of mortgage-backed securities, the securities generally have higher yields than other investment-grade bonds, the officials said.

High-tech surplus

NEW YORK — A slowdown in the high-technology industry along with overbuilding in general has created an abundance of available space for high-tech companies, according to a report from Julien J. Studley Inc., New York, a real estate services company.

Office/research and development buildings are an area of investment for many pension funds.

Prudential promotion

NEWARK, N.J. — John Hoffman has been named a vice president with The Prudential Realty Group, Newark.

Mr. Hoffman had been head of acquisitions and sales for the realty group.

$5.6 billion in direct . . .

Continued from page 40
nership in TREET, a commingled real estate fund owned jointly by regionals and AT&T, and now want to move more into direct investing, said Mr. Hodes.

There are other types of plans, too, using separate accounts. About $500 million of the new business Richard Ellis received is believed to have come from the Royal Dutch Shell pension fund, one of the largest foreign investors in the U.S. non-residential real estate market. Officials for the company would not confirm that account, however.

Overall, the advisory firms surveyed managed $4.36 billion for foreign pension funds June 30.

Commingled funds, however, did not miss out on the increased flow of assets; those funds garnered $5.6 billion of new business, or 45%, and held $49.9 billion, 68%, of overall tax-exempt assets.

Prudential Realty Group, Newark, N.J., reported receiving $390 million in new business for its several commingled accounts.

Prudential manages several commingled funds, including the nation's largest, and some say the oldest, PRISA I, an open-end fund with $4.7 billion in assets.

Aetna also reported significant additional contributions in commingled assets, $453 million, as did Equitable, $217.5 million.

Another large commingled fund adviser, The RREEF Funds, San Francisco, reported $119 million in contributions to its closed-end commingled funds.

Also, while some managers buy only properties in relatively mint condition, industry observers have seen an increased willingness by fund executives to invest in properties that need rehabilitation.

Among the leaders in new business, Richard Ellis takes such an "added value" approach. Experts say the fund executives' willingness shows their increased familiarity with real estate investment in general and increased comfort with different investment styles.

Overall, the managers reported total tax-exempt assets under management of $73.3 billion as of June 30, an increase of 40.7% from last year's $52.1 billion.

Of the total, $45.2 billion or 61.7% was in pure equity; $12.2 billion or 16.6% was in hybrid debt; and $15.9 billion, 21.7%, was in mortgages. The numbers do not add up because several managers could not provide asset breakouts.

The firms surveyed reported total taxable and tax-exempt assets under management of $236.7 billion, an increase of 22.6% from last year.

By property type, the average tax-exempt asset mix was 40% office, 22% retail, 20% industrial, 6% land and 12% other.

The biggest change is in offices, which in last year's survey had 45.2% of the assets. This drop can be explained by the overbuilt office market.

Companies still favor existing properties, with 93% of the tax-exempt assets invested in existing and 7% invested in developmental ones.

The leaders of managers of tax-exempt pure equity holdings remained fairly steady from last year, with only two newcomers — JMB and Eastdil Realty Inc., New York. The biggest moves in the list came from Copley Real Estate Advisors, Boston, which ranked fifth this year compared with 10th last year, and Aetna, which dropped to sixth from third.

Prudential Realty Group, Newark, N.J., although not making the Top 10 in new business, maintained its lead among equity managers and garnered sixth place among managers ranked by mortgages.

There were four newcomers to the list of the Top 10 mortgage advisers: Aetna; L.J. Melody & Co., Houston; Prudential; and Karsten Institutional Realty Advisors, Los Angeles.

Of its $12 billion in mortgage investments for tax-exempt clients, $1.1 billion is in participating mortgage accounts.

The significant increases in contributions show, some real estate advisers think, that real estate is now accepted as a traditional form of investment by many pension executives, and not just an alternative investment. ■

N.H. unions . . .

Continued from page 16
bricklayers' plan.

In addition, the loan was renewed by the carpenters' fund, the chief lender, without prior approval of the bricklayers' fund, the department charged.

The loan was refinanced in 1984 from another lender at an 11% interest rate, and the fund was repaid in full on Jan. 7, 1984.

Not only did the trustees' failure to investigate the loan's quality and currently available rates violate the prudence standards under the Employee Retirement Income Security Act, but the loan represented an excessive portion of the bricklayers' fund's assets, exposing the fund to excessive risk, the government alleged.

Between April 1978 and August 1978, the fund disbursed $146,235 of its total $150,000 commitment, representing about 30% of its assets at the time, the Labor Department said.

According to the government's estimates, the fund lost some $35,000 in lost interest over the six years by charging a below-market rate.

The bricklayers' pre-trial memorandum denied the department's allegations, arguing the loan was reasonable based upon "mini-permanent" loans available in 1977, and that the trustees met ERISA's prudence requirements.

The trustees further maintained the church loan helped support the contribution base of the fund by creating new union jobs, and "sent a message to the local building community" that financing would become available to developers who hired union labor covered by the plan.

Faced with a serious decline in work done by union contractors, the trustees argued, "The Trustees' effort to sustain the Plan's contribution was not only acceptable; it was a matter of survival."

In addition, the trustees claimed that the return on the loan outperformed historic returns of the fund's outside investments advisers, as well as exceeded the fund's long-term actuarial assumption of 6%.

The trustees also denied Mr. Dawson used fiduciary responsibility on the investment but "was merely a messenger between the trustees and the church congregation."

They further denied they had the legal right to renegotiate the terms of the loan upon its renewal in 1981.

In opposing the defendants' arguments, the Labor Department noted the loan generated only $753 in new contributions, reducing the unfunded accruability of $911,450 in 1977 by less than one-tenth of 1%.

The government also rejected the defendants' comparisons of other available investments as incorrect or irrelevant. ■

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Cash Management

Loan participations bolster banks

By Chuck Paustian

Money center banks, which have been denied entry to domestic commercial paper underwriting, are developing a multi-billion-dollar substitute market for short-term financing through bank loan participations.

By aggressively pricing their short-term loans and then selling portions of them to investors, the banks hope to slow the erosion of revenue and corporate relationships, a result of the growth in the commercial paper market.

Companies, taking advantage of the low rates quoted on the loans, may start replacing borrowings from other banks and the commercial paper market with the loan participation arrangements.

"We are an A1, P2 company. The banks could — and have — beat commercial paper rates," said William E. Beyer, manager-cash and banking at Portland General Corp., the parent of Portland General Electric Co., Portland, Ore.

"The banks could lead us to take out (reduce) some commercial paper and substitute bank debt (loan participation). We are looking at the possibility of doing that now."

"In a lot of ways, loan participations are like commercial paper, but loan participations have a ways to go before they'd be as liquid," said Daniel J. Donoghue, a bank analyst with Duff & Phelps Inc., Chicago.

"In a lot of ways, it's an investment banking role for banks," he said.

The investors are attracted to the loan participations because of the credit-worthiness of the companies behind the loans and the greater returns than commercial paper.

"Most of the loans that get sold are Baa or better," said James E. Cotten, managing director and head of asset sales at Chase Investment Bank, New York, a subsidiary of The Chase Manhattan Bank.

"Essentially, it's the same type of risk they'd be buying if they bought ABC Corp. commercial paper," he said, adding investors usually receive rates between five and 25 basis points higher than the same company's commercial paper.

Although bank loan participations started about four years ago, the volume of loan sales has increased during the past two years.

"It started because the spreads on commercial loans were so small the banks wanted to get the loans off their books," said Allan Munro, a partner at Greenwich Associates, Greenwich Conn.

Mr. Cotten estimated there was more than $150 billion in loans sold on a participation basis during 1985.

Despite the advantages, some corporations remain somewhat leery about loan participations.

A recent survey conducted by Greenwich shows corporate cash managers increasingly are becoming aware of bank loan participations and have voiced concern about several potential drawbacks of the system.

"It's very difficult to see what a bank is doing vis-a-vis a corporate lending arrangement," said Finis A.R. Morgan, former assistant treasurer at American Petrofina Inc., Dallas. Mr. Morgan retired in February.

Money center banks have seen their short-term loan income, and subsequently their corporate relationships, dwindle during recent years as a result of the growth in

Continued on page 59

Firms pool short-term financing needs

Programs allow small issuers access to commercial paper markets

By Barry B. Burr

Two groups, using different approaches, plan to set up commercial paper issuing pools enabling small companies that were unable to tap the public market for short-term debt to take advantage of the relatively less expensive source of funds.

Capital Funding Partners, owned in part by Ashwell & Co., a Chicago-based commercial paper dealer, is seeking to enroll a diverse group of small companies for its pool and hopes to sell its first commercial paper for them later this year, or early in 1987.

The Cooperative Association of Tractor Dealers Inc., Chevy Chase, Md., plans to copy for other trade associations its existing $110 million commercial paper program, which provides a pool of low-cost, short-term financing to independent Caterpillar Tractor Co. dealers.

Edward A. Newton, Cooperative Association president, said the group expects to sell its expertise on commercial paper issuing pools to other, unrelated trade groups, enabling their members to sell the low-cost, short-term funds in the public market.

"We think we could provide this commercial paper service at competitive rates for other industry organizations," Mr. Newton said.

"We are now developing this service for other industry organizations. Our legal staff has already developed the documentation for (extension to) other industry organizations."

He declined to name the trade groups until arrangements are completed.

The Cooperative Association, which Mr. Newton helped found, began its commercial paper program in 1981. The program now has 21 dealers participating, raising on average $5 million each in commercial paper financing.

Edward Newton and Dolores Coutts of the Cooperative Association of Tractor Dealers

Capital Funding Partners, Chicago, plans to open its commercial paper issuing pool to potentially any company, said Paul Forbrich, president.

He declined to name them.

Capital Funding's other partners, aside from Ashwell, are Mr. Forbrich and a former executive with Philipp Brothers Inc.

"We are giving middle-market companies access to the commercial paper market through credit enhancements," Mr. Forbrich said.

Speaking of the proposed program, he said, "The (potential) clients look at it and say this is fabulous.

"Individually, they don't have large enough borrowing regularly and they don't have adequate credit to issue commercial paper themselves."

He expects the minimum participation would be for $2 million to $5 million, while the maximum might be $30 million to $35 million, although he added the exact amount "is a function of each company's borrowing costs."

The commercial paper issuing pools provide further evidence of the erosion of banks as sources of short-term corporate borrowing, a trend that has been developing in the 1980s.

A few other issuing pools exist, but Mr. Forbrich said none passes on the cost to participating companies on a cost-plus basis.

Banks, however, continue to play a role in the commercial paper programs. Like the Cooperative Association, Capital Funding Partners' ability to sell commercial paper depends on providing guarantees for investors, said Mr. Forbrich.

He said Capital Funding Partners plans to buy a credit enhancement to enable major credit-rating companies to give its commercial paper program their top rating.

"We're having a bank provide the credit enhancement," he said. Capital Funding is talking with several banks now about the enhancement, he added. He declined to name the banks.

To protect the bank providing the program's credit enhancement, Mr. Forbrich said each company participating in the

Continued on page 58

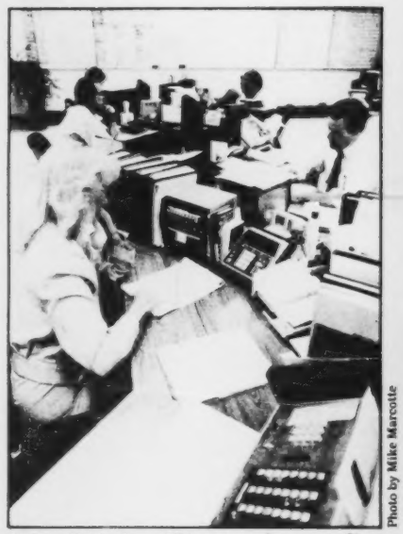


Photo by Mike Marcotte

Ashwell & Co., Chicago, whose trading room is shown above, is a partner in Capital Funding Partners.

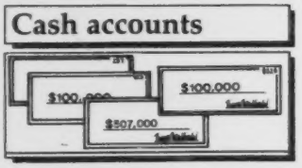
Payden & Rygel index of short maturity assets*
(for month ended August 31)

	August 1986	Quarter ended 6/30/86	Year to date	12 months ended 8/31/86	Yield level monthly change*
	Unannualized total returns				
90-day					
U.S. Treasury bill	0.6090	1.6779	4.8379	7.4948	−62
Domestic CD	0.6818	1.8351	5.2527	8.0820	−84
Euro $ CD	0.7041	1.8711	5.3260	8.1933	−90
180-day					
U.S. Treasury bill	0.7829	1.7909	5.4592	8.3118	−63
Domestic CD	0.8851	1.9687	5.7448	8.6423	−85
Euro $ CD	0.9424	2.0111	5.8230	8.7636	−95
1-year					
U.S. Treasury note	1.1263	1.9571	6.6071	9.8739	−88
2-year					
U.S. Treasury note	1.6835	1.9575	8.7541	13.8741	−63

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. 90- and 180-day Treasury bill yield level changes on discount basis.
*Basis points.
Source: Payden & Rygel, Los Angeles

Phoenix Electric selects

Cash accounts



CHICAGO — Phoenix Electric Manufacturing Co. hired Drexel Management Co., New York, to manage its short-term corporate working cash, investing in a conservative money-market strategy, according to Sandy Bank, chairman of Phoenix.

He said Phoenix assigned Drexel about $5 million to run in a separately managed account. He had been managing the money himself.

Explaining why he gave up in-house management, Mr. Bank said, "I felt that I wasn't getting a high enough return with the parameters I had."

Drexel "can invest in the same things I can, but because they have billions to invest they can take a huge position and get better returns," he added.

Mr. Bank said he expects Drexel's management to return 50 to 100 basis points, after its fee of 25 basis points, over "the highest returns I can get with ultimate safety with top bank CDs."

He said Phoenix gave Drexel two explicit investment parame-

Continued on page 60

THE SECOND mailing of questionnaires for *Pensions & Investment Age*'s 1986 corporate cash management survey has been sent. The deadline for returning the questionnaires is Sept. 21.

If you have not received a questionnaire and believe you should have, contact Carol Wiley, directory coordinator, (312) 649-5486.

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Pensions & Investment Age

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Managers pressured to change proxy votes

By Chuck Paustian

Corporate executives alter the proxy voting policies of some institutional investment managers by threatening, both directly and indirectly, the loss of pension accounts and other lines of business, *Pensions & Investment Age* has learned.

Industry sources said the executives involved in proxy battles use the clout of both existing and potential business relationships to change the proxy votes of investment managers.

The sources also said the executives enlist the aid of their counterparts at other corporations to bring pressure on the managers.

James E. Heard, deputy director of the Investor Research Responsibility Corp., Washington, said money managers have told him of several instances of pressures brought by corporate executives.

"I think it's more widespread than we realize. The kind of anecdotal evidence I have is only the tip of the iceberg," he said.

Mr. Heard declined to name the individuals, or the institutions, but described several examples:

- Two commercial banks changed their voting policies as a result of pressure from corporate executives.

"In the cases I know of, the pressure initially came from outside the bank, but resulted in significant pressure inside the institution," said Mr. Heard.

- An insurance company was instructed by its parent company to vote in favor of all anti-takeover proposals, rather than independently reviewing such proposals.
- Two insurance companies changed their voting policies to favor all anti-takeover measures, after opposing them for the previous two years.

Robert A. Monks, president of Institutional Shareholder Services Inc., Washington, also said he knows of examples of corporate pressure affecting the voting policies of investment managers.

"I have been told by a number of responsible officials of institutional investment firms (that they) were subjected to pressure with respect to their votes," he said.

Mr. Monks, who is a former administrator of the Department of Labor's Office of Pension and Benefit Welfare Programs — now known as the Pension Welfare Benefits Administration, also declined to name names.

He did say proxy battles often place money managers in a difficult situation. "It's a place where

Continued on page 80

Pensions & Investment Age

Inside:

CORPORATE FINANCE: Lands' End dashes local investment banks' hopes for a role in its planned IPO — page 39.

CASH MANAGEMENT: An account analysis standard, due to be released in November, could relieve several headaches for corporate cash managers, but its quick adoption by banks doesn't seem likely — page 25.

Bill to reshape benefits

Defined contribution plans will change, but won't die

By Joel Chernoff and Richard Gillespie

TAX REFORM

WASHINGTON — The tax reform bill expected to pass Congress next week will force a restructuring of all defined contribution plans, but few expect the plans to wither away.

What's more, the bill's sweeping changes in pension rules will cause a massive review by employers of their companies' retirement income objectives.

How employers will come out of the process remains unclear. "I find it hard to shake it out. It's so individual by company," said Theresa Stuchiner, partner at Kwasha Lipton, Fort Lee, N.J.

The bill was designed, in part, to enhance the appeal of defined benefit plans, chiefly by withdrawing many of the shorter-term savings-type features of defined contribution plans.

Nonetheless, the overall effect of the bill could bolster usage of 401(k) salary reduction plans as one of the few remaining vehicles where employees can shelter a portion of their income and receive a matching contribution from their employers. In particular, the loss of deductibility for contributions to individual retirement accounts for higher-paid employees could increase this pressure, experts said.

Meanwhile, the bill makes old-fashioned thrift plans a thing of the past, some believe. It's "the untold story of tax reform," said Edward J. Davey, vice president-technical analysis for Johnson & Higgins, New York.

A series of changes, including how different industries fare under the tax bill, may cause a sweeping reassessment of how both defined benefit and defined contribution plans fit into the corporate structure and how they are viewed by companies. For example:

- Tax bill changes affecting distributions from defined contribution plans may cause employee participation to suffer. And to meet toughened non-discrimination rules, employers might have to enhance these plans or limit benefits to managers. In any event, a giant re-education effort for employees will be required.
- Lessened benefits for senior management will cause companies to supplement their retirement benefits through unfunded, non-qualified plans. At the same time, this may erode executives' ties to the qualified retirement plans.
- Lower personal tax rates will cause employers to focus more on cash compensation for senior executives, especially if companies believe tax rates will go back up in the future.

In addition, the lower rates, combined with a bevy of new restrictions, will discourage small companies from setting up plans.

"The engine that has driven plan formation . . . has pretty well been driven off the tracks," said Everett T. Allen Jr., vice president for Towers, Perrin, Forster & Crosby, Philadelphia.

- Shorter vesting rules and stricter integration standards will boost pension costs for many employers, although the cost impact will vary dramatically.
- New coverage rules, while still unclear, will force plan mergers or altered benefits among companies that maintain separate plans for small units or those with separate plans for salaried and non-union hourly workers. Also, firms with large numbers of part-time employees, such as retailers, will be hard hit.

Continued on page 77

Phantom surplus haunts USX

By Barry B. Burr

PITTSBURGH — USX Corp.'s $1.9 billion in excess pension assets that is luring corporate raiders appears to be a phantom surplus that could disappear if all or some of USX's overfunded pension plans were terminated.

Some analysts cast doubt on the size of the reversion USX, or raiders, could receive, citing falling interest rates, rising annuity costs, taxes and the expense of possible additional plan shutdowns.

Still, one analyst said a USX reversion could yet exceed $1 billion.

Phantom surpluses already have forced United Air Lines Inc., Chicago, to revise termination proposals, in large part because the excess assets no longer were there.

In addition, Goodyear Tire & Rubber Co., Akron, Ohio, canceled a termination filing. It had expected to recapture $350 million from a $1.5 billion plan.

Gary Pines, a consultant with Towers Perrin Forster & Crosby, Chicago, speculated lower interest rates and higher annuity prices could absorb much of the surplus USX reported it had at the end of last year. Mr. Pines noted, however, he is not familiar with the USX plans.

USX executives, in an official statement, said termination of the company's plans "wouldn't result in a significant cash contribution to the corporation."

In fact, "additional funding may be required in the near future," the statement said.

USX officials declined to elaborate on the statement, which noted the company's actuary — Buck Consultants Inc., New York — has been asked to conduct a study of its liabilities.

The USX statement was issued in response to suggestions by some analysts that raiders who recently acquired large stakes in USX cited the use of the pension surplus to buy back USX stock to boost the value of its shares.

Robert Holmes a Court, of Australia, disclosed last month he might buy as much as 15% of USX stock. In addition, there have been unconfirmed reports of interest by corporate raiders.

William Hoffman, general manager-public affairs at USX, said he knows of no action the company is taking to protect any surplus it might have. Other firms, such as Union Carbide Corp., Darien, Conn., have adopted so-called pension parachutes, an anti-takeover device to deny those involved in a hostile takeover the excess pension assets.

USX reported its aggregate pension assets totaled $9.39 billion, while the present value of its liabilities totaled $7.46 billion, as of Dec. 31, the latest data, leaving a $1.9 billion surplus on a termination basis.

Continued on page 77

Salomon repeats as favored firm

By Marci Baker

NEW YORK — For the second consecutive year, Salomon Brothers Inc. took the crown as the favored brokerage firm among institutional investors assessing the equity and fixed-income research and execution capabilities of the country's brokerage firms.

Thanks largely to its prowess in the fixed-income arena, Salomon Brothers garnered more points than any other firm on Wall Street in *Pensions & Investment Age*'s sixth annual institutional brokerage survey.

Merrill Lynch & Co. and Goldman, Sachs & Co. retained their second- and third-place ratings, respectively.

The survey results were based on 97 responses from independent money managers and investment officers of internally managed pension funds with an aggregate

Continued on page 33

Focus is on Minnesota

5 invest in venture fund

By Trudy Ring

MINNEAPOLIS — Five tax-exempt funds in Minnesota have confirmed they made commitments to Superior Ventures, a $36 million venture capital partnership that will focus on in-state investments.

The funds and the amounts committed are: the $395 million Pillsbury Co. pension fund, Minneapolis, a $3 million commitment; the $550 million Control Data Corp. pension fund, Minneapolis, $2 million; the $350 million Bush Foundation, St. Paul, $2.5 million; the $11 billion Minnesota State Board of Investment, St. Paul, $6 million; and the $225 million University of Minnesota endowment fund, St. Paul, $1.5 million.

It was the initial venture capital commitment for the foundation and one of two initial commitments for the endowment fund.

Officials of two other pension funds that reportedly invested in the venture capital fund declined comment.

Companies that invested in the fund with corporate, rather than pension, money were St. Paul Fire and Marine Insurance Co., St. Paul, and Minnesota Power & Light Co., Duluth, officials at those firms said.

The partnership, which closed in June, will be diversified by industry and will invest in both start-up and later-stage companies, with some investments in special situations and leveraged buy-outs, said Mitch Dann, partner in IAI Venture Capital Group, manager of the fund.

IAI Venture Capital Group is affiliated with Investment Advisers Inc., Minneapolis.

IAI Venture Capital organized Superior Ventures because Minnesota's strong base in technology and health care represented numerous opportunities for venture capitalists, Mr. Dann said.

The venture capital group's staff includes people who have built businesses and now can spend time helping other enterprises grow, he said.

"You can't do that far away from home," he said.

Pillsbury's allocation rounds out the diversification of the pension fund's venture capital commitments, said John Bohan, vice president-pension investment. The fund has investments in partnerships concentrating on other parts of the country, Mr. Bohan said.

The fund has about 3% of its assets committed to venture capital, including a commitment to IAI Venture Partners, IAI Venture Capital Group's earlier fund, which closed in 1983.

Mark Feldman, manager-retirement department at Control Data said of Superior Ventures, "It looked like it would be a well-run fund," he said. "It's an organization we have a relationship with."

Control Data also participated in IAI Venture Partners.

The Bush Foundation's commitment is its first move into venture capital, said Gerald Skogley, business manager.

The foundation's asset allocation model, prepared with consultant DeMarche Associates, Kansas City, Mo., suggested venture capital would be an attractive investment, Mr. Skogley said. Also, the partnership may aid the local economy, he said.

The Minnesota investment board went into Superior Ventures for returns, not as any type of social investment, said John N. Griebenow, senior portfolio manager-alternative investments.

"We know Minnesota very well," Mr. Griebenow said. "We believe that there's plenty of opportunity that somebody such as Superior Ventures could exploit."

Superior Ventures is the 10th venture capital limited partnership in the board's portfolio, he said.

The board has $143 million committed to those partnerships.

The investment board also recently hired T. Rowe Price Associates Inc., Baltimore, to handle and make buy or hold decisions on initial public offerings from the venture capital portfolio, Mr. Griebenow said. No companies in the portfolio have gone public yet, but the board wanted to be ready when this happens, he said.

The University of Minnesota fund committed $1.5 million to Superior Ventures and the same amount to Northern Boundary Partners II, a fund investing in young companies primarily in the upper Midwest, said Roger Paschke, director of investments.

Northern Boundary Partners is managed by Piper, Jaffray & Hopwood Inc., Minneapolis.

The fund isn't limited to regional venture capital partnerships, but considers them whenever possible, Mr. Paschke said. ■

Tax sessions never sounded so sensuous

By Richard J. Gillespie

WASHINGTON — A pension industry representative achieved brief notoriety when she left a tongue-in-cheek message replete with Mae West-style innuendo in tax-code-speak on her telephone answering machine.

"Hello, do you speak tax code?" she purred in a husky voice. "If so, how would you like to have a multiple integration? I will ignore the gross disparities in your withdrawal and lump-sum distributions and we can just recede to the House if you like, or we can roll over right here. You don't have to worry about protection, we can just use the elapsed-time method. Glad to be of service."

Within hours, the number was all over scandal-loving Washington. Within days, it hit The Federal Page column in The Washington Post.

The voice turned out to be that of Karen Friedman, education director of the Pension Rights Center, and a writer and performer with a local satirical group, the Public Interest Follies.

A somewhat embarrassed, but unrepentant Ms. Friedman stressed the call was purely a personal endeavor and should in no way reflect upon the Pension Rights Center, which supports retirees' rights issues.

According to Ms. Friedman, she had returned home from a long, tiring and extremely boring session with members of the joint tax committee, and was feeling exhausted, so she composed the message.

Photo by Ken Heinen

Karen Friedman

"I thought there had to be humor in the tax bill. Everybody was getting so burnt out about it. There has been a complete dearth of humor in Washington lately, and people are getting really hungry for it. But I had no idea it would take off like this," said Ms. Friedman, who composed the first known pension industry satirical review at a Pension Rights Center fund-raiser some years ago.

The message was great for business, according to Ms. Friedman, who said she lined up some gigs for the Public Interest Follies as a result, including one from a member of the National Republican Senatorial Committee.

A spokeswoman for the NRSC strenuously denied the allegation and claims it must have been a practical joke.

Questionnaires due for directory

Pensions & Investment Age will publish its 1986 directory of investment consultants Nov. 10.

Questionnaires have been mailed to more than 200 consultants and replies are due Oct. 6 for inclusion in the directory.

If your investment consulting firm has not yet received a questionnaire, or if you have questions regarding the questionnaire or directory, call Carol Wiley, directory coordinator, (312) 649-5486.

L.A. County recoups $1.5 million from bank

By Steve Hemmerick

LOS ANGELES — The $6 billion Los Angeles County Employees' Retirement Association has settled a dispute with its custodian, Security Pacific Bank, in which the fund will be paid at least $1.5 million in back interest.

And for unrelated reasons, four other California pension funds in the past six months have switched from Security Pacific to East Coast banks for master custodial services.

The four that dropped Security Pacific as custodian are the $500 million Screen Actors Guild, Producers, North Hollywood, Calif.; the $560 million Sacramento County Employees' Retirement Association; the $625 million San Diego County Employee Retirement System; and the $400 million Ventura County Employees' Retirement Association.

Officials from the four funds said there is no single reason for the change. But they did cite a desire for greater customization of reporting software and communication problems as being among the reasons.

Board members of the Los Angeles County system said Security Pacific didn't always credit the fund with dividends and payments between April 1981 and December 1985 on the payable date — whether or not those dividends and payments had been received on the payable date.

Board members said they had an understanding with Security Pacific that the bank was to credit the fund on the payable date.

The dispute between the bank and the fund concerning timely crediting was first proposed for settlement in April. Since an agreement was reached on the settlement contract, some additional amount of back interest was paid to the county, but the amount, although believed to be relatively small, is unknown.

County pension fund officials also are in the midst of a five-year review of the fund's investment transactions.

A report by Richard C. Dixon, Los Angeles county treasurer and tax collector, said the pension fund staff found instances of dividends and payments from securities received after the payable date being credited to the retirement account after the payable date.

The bank, the report said, post-

Continued on page 80

Currency-linked paper draws execs' interest

By Marci Baker

NEW YORK — Salomon Brothers Inc.'s new short-term product — currency-linked commercial paper — may be a best seller, at least among Salomon clients.

Performance Indexed Paper, or PIPs, has piqued the interest of a number of the firm's commercial paper clients.

Some Salomon clients last week expressed a strong interest in looking more closely at the product.

"When you have the ability to sell dollar-denominated paper with little additional risk and to sell it at a lower price, common sense suggests you take a serious look at it," said Michael Koban, treasurer of Hospital Corp. of America, Nashville, Tenn. Indeed, a try, unless accounting, tax or other technical problems surface.

"It's hard to envision there will be problems in those areas," Mr. Koban said.

A review of the paper is on the "things-to-do list" at PepsiCo Inc., Purchase, N.Y., said Janet Levine, assistant treasurer.

"We've heard about it, but haven't received any specific documents describing the product," she said. "But if Salomon has some way to do commercial paper at an attractive cost, it's something we want to look at."

"We think this is a very intriguing idea," added Charles Wilson, treasurer at Ryder System Inc., Miami.

"There aren't too many ideas we would jump at to save five to 10 basis points, but this may be one

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International Paper names pension chief

NEW YORK — Myra Drucker has been appointed director-trust investments at International Paper Co., where she will oversee $1.4 billion in pension assets.

Ms. Drucker has been manager-trust investments at Xerox Corp., Stamford, Conn., which has about $2.4 billion in employee benefit assets, for 4½ years. At International Paper, she replaces Charles T. Henry, who left in January to pursue personal business interests.

Ms. Drucker said she had not been looking to leave Xerox, but International Paper made her an offer she couldn't refuse.

"I will be reporting directly to the chief financial officer," she said.

"Working with Bob Evans (director-employee benefit assets) at Xerox has been a wonderful experience. It is the best No. 2 slot in the country, and it is better than a lot of No. 1 slots. But IP is giving me the chance to be No. 1."

Ms. Drucker, who previously has worked for Peat Marwick Mitchell & Co. and Drexel Burnham Lambert Inc., is president of the National Investment Sponsors Federation, the national association of regional pension sponsor groups.

Mr. Evans said no action has been taken on hiring a replacement for Ms. Drucker yet, and he had no candidates in mind.

He said International Paper has given Ms. Drucker an excellent opportunity.

"When you have someone as bright and as talented as Myra, it's only a matter of time before you are likely to lose them," he said. ■

Corrections & clarifications

• The following profile of CIGNA Asset Advisers Inc. was omitted inadvertently from the Sept. 15 real estate advisers directory.

CIGNA Asset Advisers Inc.
Hartford, Conn. 06152; (203) 726-6000

Tax-exempt real estate assets	$1,058 million
Equity	$1,058 million
Tax-exempt real estate clients	434
Total real estate assets managed	$10,764 million
Equity	$2,274 million
Mortgages	$8,490 million

As of June 30, CIGNA Asset Advisers Inc.'s real estate holdings for tax-exempt clients had a market value of $775.3 million. Of the total $1.06 billion in real estate equity, $151.5 million represented contributions received but not invested and $131.3 million, contributions committed but not yet received.

Of the total, $926 million was in commingled funds and $132.1 million was in direct, separate accounts.

The firm managed $52 million for foreign pension funds.

All of the invested assets were in existing properties. The asset mix by property type was office, 32.7%; office research and development, 33.4%; hotel, 6%; apartments, 12.7%; industrial, 5.1%; and retail, 10.1%. CIGNA is emphasizing retail and apartment facilities.

The firm offers several commingled funds.

Fund S, a closed-end limited partnership for endowments, foundations and non-qualified pension plans, closed January 1985 and is almost fully invested. Investments are allowed in retail, industrial, research and development/service center, apartments and office buildings on a wholly owned or joint-venture basis.

CEREF, a closed-end equity separate account for ERISA funds, closed June 30, 1985. It is invested in fully built and leased retail, hotel, industrial, apartment, office building and research and development properties.

Separate Account R, an open-end fund for ERISA plans, is invested in moderate-size properties capable of generating attractive, increasing cash returns while appreciating in value. Investments are in existing and to-be-built commercial properties diversified by location and property type.

Two closed-end funds will be offered in the coming year, investing in properties requiring rehabilitation or upgrading, and other special situations. Fund T will be a limited partnership for endowments, foundations and non-

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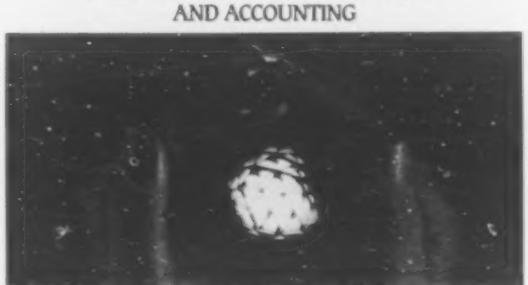

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Opinion

1 study doubts ERISA birth . . .

A STUDY BY RICHARD A. IPPOLITO, chief economist at the Department of Labor raises some profoundly disturbing questions about the Employee Retirement Income Security Act.

Mr. Ippolito, in his study, argued ERISA was not an employee protection law targeted at eliminating pension fraud. Indeed, he argued there was little evidence that fraud — the deprivation of employees of promised pensions by employers — was a serious problem before the passage of ERISA.

It was, he argued, a law designed to transfer benefits from a large group, taxpayers and shareholders, to a small favored group, union members, specifically members of union pension plans.

This transfer, he said, took place through the Pension Benefit Guaranty Corp., and he suggests ERISA was only passed so the PBGC could be established.

Mr. Ippolito based his conclusions on economic and statistical analysis of the pension industry before and after ERISA. If it stands up to critical analysis, a case could be made for the abolition, or at least major modification of the PBGC.

Among the questions raised by the study are:

- To what extent were the members of Congress and their legislative staffs manipulated by union executives in the writing of ERISA? Or were members of Congress responsible for the passage of ERISA aware there was no great incidence of fraud and the aim was to provide a unique benefit to union plan members?
- If members of Congress were not manipulated and really believed fraud to be widespread, why were not stronger measures passed in ERISA to prevent fraud? Mr. Ippolito argues persuasively that fraud is just as easy after ERISA as it was before ERISA.
- If there was no great incidence of pension fraud, why should corporations continue to bear the expense of filling out Form 5500, the pension fund annual report?
- If members of Congress truly believed there was a serious problem, why was the PBGC not set up on proper insurance industry lines, with risk-adjusted premiums?
- Why should the great bulk of taxpayers and corporate shareholders continue to subsidize unionized corporations and their employees through the PBGC?
- Why has it been virtually impossible to reform the PBGC to make it function more like an insurance company and thus reduce the incentives for corporations to move away from defined benefit plans to defined contribution plans?

In all probability, these questions will not be answered. Mr. Ippolito's study probably will be studiously ignored by Congress. He has raised embarrassing issues about the heritage of ERISA.

However, an embarrassed silence on Capitol Hill may confirm what Mr. Ippolito's study suggests — ERISA's birth may have been illegitimate.

. . . a second confirms bad news

MR. IPPOLITO had even more bad news for pension funds. In two separate studies, he confirmed earlier studies that showed pension funds had underperformed the market over time and mutual funds had outperformed it.

In particular, it confirmed the Berkowitz-Logue study reported in *Pensions & Investment Age* Aug. 4.

The differences between the Berkowitz-Logue study and Mr. Ippolito's pension fund study are that the Berkowitz-Logue study used only 120 plans for a 16-year period while the Ippolito study examined 1,500 plans for a seven-year period.

Nevertheless, they both concluded pension funds underperform the market indexes.

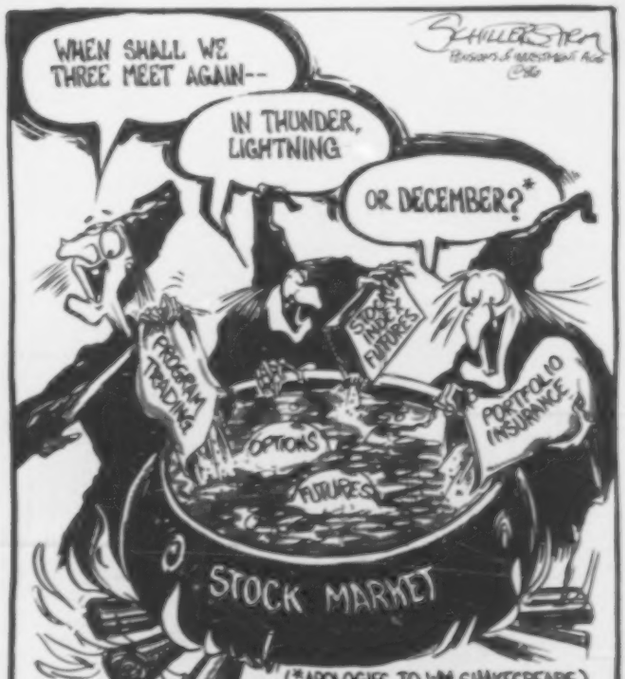
Messrs. Berkowitz and Logue theorized excessive turnover and high management fees might be the cause of this underperformance.

Mr. Ippolito's study found no evidence that turnover or fees were the cause.

The causes of underperformance by pension funds deserve close study, now that Mr. Ippolito has challenged the handiest excuses.

Perhaps it is simply that in aggregate, pension funds are so large they dominate the market and therefore cannot be expected to beat the market.

Even if that is so, it does not mean individual pension funds cannot beat the markets during long periods. But it does mean pension executives must consider whether it is worth the time and the effort to seek better-than-market performance when an index fund will deliver performance equal to the market.



Letters to the editor

MicroStar data

To the Editor: I noticed Bank of America's MicroStar service was omitted from the treasury workstation listing in your July 21 Cash Management Directory. Since MicroStar is a leader and the largest selling service available, we were surprised to see it missing from your list.

I apologize if this was an oversight on our part, although in the listing under "U.S. Banks," the information is current and accurate. In your chart of bank services, you list BofA as having a treasury workstation with the note "see profile for additional information."

In case we failed to supply you with the information, Bank of America's microcomputer-based MicroStar products include communications, liquidity management, foreign exchange management, electronic funds transfer, cash accounting, investment and debt management, letters of credit initiation and multicurrency debt and investment management. The products can be used on a stand-

Currently, MicroStar is used by more than 500 customers worldwide.

Many of the products have been tailored to meet the needs of customers in specific geographic markets.

In the future, please feel free to contact me for information about MicroStar.

Abdul Premji
Vice president
Bank of America
San Francisco

Editor's Note: Bank of America was sent a questionnaire, and was contacted several times.

Wrong number

To the Editor: Your Sept. 15 Money Movers article should have identified the Illinois Municipal Retirement Fund as $3 billion rather than the published $2.3 billion fund.

H. Mori
Assistant director
Illinois Municipal
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Wall Street's WINNERS

Salomon repeats . . .

Continued from page 3
of about $400 billion in assets under management and an average of $4.1 billion each.

Investors were asked to rate the best firms for equity research, equity trading, bond research and bond trading.

In tabulating the scores, firms named first in each of the four categories were awarded three points. Those named second were given two points and those named third, one point.

Under this system, Salomon scored 402 points; Merrill, 300 points; and Goldman, 298 points.

First Boston Corp. placed fourth in the overall score, with 213 points. Well behind First Boston was fifth place Morgan Stanley & Co., with 97 points.

Those responding to the survey paid out $242 million in commissions to brokers in 1985, up 27.4% from the $190 million paid in the previous year. Individually, brokerage fees ranged from $225,000 to $16.6 million. The average for brokerage fees was $2.5 million, a 19% increase from the average reported for 1984.

The money managers on average used 44 brokerage firms, up six from last year's survey. In addition, the average per-share trading cost continued its decline for the third consecutive year.

The cost of a trade fell to an average of 9.6 cents a share in this year's survey, down 9.4% from the 10.6 cents averaged in the previous year.

Goldman, Sachs, meanwhile, moved ahead of Merrill Lynch as the firm generating the most commission dollars.

Respondents reported they directed an aggregate of $12.3 million in commissions to Goldman. Merrill received the second largest aggregate sum — $11.1 million — followed by Morgan Stanley, with $4.2 million; Salomon Brothers, $3.8 million; and E.F. Hutton & Co., $2.8 million.

In *P&I Age*'s survey last year, respondents gave Merrill Lynch the most in commission dollars — $8.6 million — followed by Goldman, $7.4 million, and Salomon, $3.4 million.

In the brokerage ratings of research and execution, Salomon chalked up most of its total points as a result of its strength in the fixed-income categories. The firm ranked first in bond research, with 155 points, receiving 37 first-place mentions, 20 second-place ones and four third-place mentions.

At the same time, it generated 123 total points from respondents for best fixed-income execution. Respondents mentioned Salomon first 26 times; second, 18 times; and third, nine times.

Salomon's closest contender in fixed-income research was First Boston, which garnered 80 points. First Boston received 15 first-place mentions; 13 second-place mentions; and nine third-place ones.

In fixed-income execution, Merrill Lynch came in second, with 82 points. Merrill won 17 first-place ratings for fixed-income execution, 11 second-place ratings and two third-place ratings.

While Salomon ran way ahead of the pack in the fixed-income research and execution categories, other firms took top honors for equity research and block trading.

In equity research, Merrill was the leader for the fourth consecutive year, with 104 points in the category. The firm was listed first by 24 respondents; second by 11; and third by 11.

Goldman, Sachs came in second in equity research, garnering 74 points. The firm was rated first by 15 respondents, second by 12 respondents and third by five.

First Boston was third in equity research, with 45 points; Drexel Burnham Lambert Inc. was fourth, with 32 points; and Salomon was fifth, with 30.

Goldman grabbed the spotlight for best block trading capabilities. It was awarded 152 points, with 36 managers listing the firm first; 17 picking it second; and 10, third.

Salomon came in second in block trades, tallying 94 points, with 17 first-place mentions, 19 second-place mentions and five third-place mentions.

Merrill finished third, with 68 points; Morgan Stanley, fourth, with 41 points; and First Boston, fifth, with 35.

Alex. Brown & Sons, Baltimore, was named the leading regional investment banking firm, moving to first place from third last year. Alex. Brown generated 51 points; the firm received 12 first-place mentions; four second-place ones; and seven third-place mentions.

Robinson-Humphrey, Atlanta, which was third last year, took the No. 2 spot. The firm scored 34 points; it got seven first-place mentions; three second-place mentions and seven third-place mentions.

William Blair & Co., Chicago, last year's top-rated regional firm, came in third this year. It garnered 32 points — six mentions each for first and second place and two for third place.

Among other results of the survey, 16% of respondents said they had executed so-called program trades, where an entire portfolio of securities is sold in one transaction.

Those engaging in these transactions reported total volume of program trades of $415.5 million, with the average transaction totaling $34.6 million. The largest trade of this kind was put at $100 million, while the smallest was $1.5 million.

Goldman and Salomon were mentioned most frequently — five times each — as the firm tapped to do the portfolio trades.

Respondents were almost evenly divided in their opinions on the effect on the stock market of program arbitrage (trading that takes advantage of the arbitrage between the cash market and the stock index futures market).

Fifty respondents, or about 52%, acknowledged concern over short-term volatility and public anxiety.

As one respondent put it: "Programs are causing too much volatility. The public's perception of risk in the equity markets will inhibit their participation."

Said another: "Program trading

Continued on page 34

How brokers rate on research and trade execution (number of mentions)

	Most often named 1st	Most often named 2nd	Most often named 3rd
Best fixed-income execution	Merrill Lynch (24) Goldman, Sachs (15) First Boston (7) Drexel Burnham (6) Salomon Brothers (5)	Goldman, Sachs (12) Merrill Lynch (11) First Boston (7) Kidder Peabody (7) Salomon Brothers (6) Donaldson Lufkin (6)	First Boston (10) Merrill Lynch (10) Drexel Burnham (8) Kidder Peabody (7) Morgan Stanley (6) Goldman, Sachs (5)
Best equity research	Goldman, Sachs (36) Salomon Brothers (17) Merrill Lynch (12) Morgan Stanley (5) Donaldson Lufkin (3) PaineWebber (3)	Salomon Brothers (19) Goldman, Sachs (17) First Boston (11) Merrill Lynch (11) Morgan Stanley (9) Kidder Peabody (2) C.J. Lawrence (2) Pru-Bache (2)	Merrill Lynch (10) Goldman, Sachs (10) Morgan Stanley (8) PaineWebber (8) First Boston (7) Smith Barney (6) Salomon Brothers (5)
Best block trading	Salomon Brothers (37) First Boston (15) Merrill Lynch (7) L.F. Rothschild (3) Goldman, Sachs (2)	Salomon Brothers (20) First Boston (13) Merrill Lynch (11) Morgan Stanley (6) Goldman, Sachs (5)	Goldman, Sachs (13) First Boston (9) L.F. Rothschild (7) Morgan Stanley (5) Shearson Lehman (5) Merrill Lynch (4) Salomon Brothers (4)
Best fixed-income research	Salomon Brothers (26) Merrill Lynch (17) Goldman, Sachs (9) First Boston (6) Drexel Burnham (3) L.F. Rothschild (3)	Salomon Brothers (18) First Boston (15) Merrill Lynch (11) Shearson Lehman (6) Morgan Stanley (5)	Goldman, Sachs (10) Salomon Brothers (9) Morgan Stanley (7) Drexel Burnham (5) First Boston (5) Pru-Bache (3)

Best stock market technician

Technician	Total weighted points
John Mendelson	58
Robert Farrell	52
Alan Shaw	26
Ralph Acampora	10

Best Wall Street economist

Economist	Total weighted points
Edward Hyman	124
Gary Wenglowski	50
Edward Yardeni	39
Gary Schilling	10

Institutional use of brokers

Total brokerage commissions paid by investment managers

Aggregate:	$241,950,454
High:	16,637,000
Average:	2,494,000
Low:	225,000

Trading costs per share

High:	27.0¢
Average:	9.6¢
Low:	5.0¢

Program transactions volume and brokers most often doing the deals

Aggregate:	$415,500,000	Goldman, Sachs (5)[1]
High:	100,000,000	Salomon Brothers (5)
Average:	34,625,000	Merrill Lynch (3)
Low:	1,500,000	Morgan Stanley (2)
		Kidder Peabody (2)

Brokers that received the most in fees from respondents

Goldman, Sachs	$12,285,940
Merrill Lynch	11,123,400
Morgan Stanley	4,242,178
Salomon Brothers	3,818,630
E.F. Hutton	2,844,518

Number of firms used by one investment manager

High:	190
Average:	44
Low:	5

[1] Number of mentions

Salomon . . .

Continued from page 33

has increased the volatility of what used to be an orderly auction market. The wide gyrations and price fluctuations resulting from the programs make trading in the specific stocks more difficult."

A third noted his firm "is concerned about the short-term positive or negative impact it can have on security prices only as it affects the willingness of the public to be participants in the security markets."

He added, however, his firm on a short-term basis looks to use "the short-term price impacts to capitalize on better buy/sell opportunities."

Many of those who said they were unconcerned over the impact of program arbitrage plays generally said it was because any increased volatility tended to be short term or temporary. Said one manager, whose response reflected those of others: "Program arbitrage can't change the general market trend by itself."

As for the best economist and stock market technicians, the opinions of respondents remained fairly constant from last year's survey.

Edward Hyman of Cyrus J. Lawrence Inc. once again ran away with the votes for best Wall Street economist, garnering 124 points, while Goldman's Gary Wenglowski held on to the No. 2 spot, with 50 points.

Edward Yardeni of Prudential-Bache Securities ranked third, with 39 points, replacing last year's third place winner, Henry Kaufman of Salomon. Mr. Kaufman garnered only six points from managers this year, to rank sixth.

Meanwhile, John Mendelson of Dean Witter Reynolds Inc. edged out Robert Farrell of Merrill Lynch as best stock market technician. Mr. Mendelson was awarded 88 points from money managers, while Mr. Farrell garnered 82.

Alan Shaw of Smith Barney, Harris Upham & Co. moved back into third place in this year's survey, scoring 26 points from managers. Mr. Shaw lost that seat in last year's survey to Stanley Berge of Tucker Anthony & R.L. Day Inc.

Asked where they think the Dow Jones industrial average will be Dec. 31, respondents revealed a bullish outlook on the stock market. Predictions for the Dow ranged from 1,587 to 2,500, with the average being 1,922 and the median, 1,925. ■

Best overall brokerage firms

Firm	Total points
Salomon Brothers	402
Merrill Lynch	300
Goldman, Sachs	298
First Boston	213
Morgan Stanley	97

Best regional broker

Alex. Brown	51
Robinson Humphrey	34
William Blair	32
Montgomery Securities	22
McDonald & Co.	21

Best equity research

Merrill Lynch	103
Goldman, Sachs	74
First Boston	45
Drexel Burnham	32
Salomon Brothers	30

Best block trading

Goldman, Sachs	152
Salomon Brothers	94
Merrill Lynch	68
Morgan Stanley	41
First Boston	35

Best fixed-income research

Salomon Brothers	155
First Boston	80
Merrill Lynch	47
Goldman, Sachs	29
Morgan Stanley	17

Best fixed-income execution

Salomon Brothers	123
Merrill Lynch	82
First Boston	53
Goldman, Sachs	43
Drexel Burnham	21

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Foundation's director out

MILWAUKEE — A Wisconsi circuit court judge permanentl has removed Harry G. John a trustee and director of the D Rance Inc. foundation, bringing t a close the suit filed by two othe directors, including Mr. John' former wife.

In a separate action involving D Rance, a federal judge denied th motions filed on behalf of Pain eWebber Inc., New York, and Pau Sarnoff, a vice president of Pain eWebber, seeking to overturn a pre vious verdict for $28.2 million i damages and requesting a new trial

The judge also awarded D Rance an additional $3.2 millio in prejudgment interest.

A third De Rance suit, filed i U.S. District Court in Milwauke and seeking more than $40 millio in damages, charges First Wilshir Securities Management Inc., fiv of its principals and Morgan Olmstead, Kennedy & Gardne Inc., all of Los Angeles, wit fraud, breach of contract an breach of fiduciary responsibility

Erica P. John, a director of D Rance, and Donald A. Gallagher director and trustee of the foun dation, filed the suit seeking th removal of Mr. John charging hir with waste and gross misconduct

William Wiseman, a partner a Smith & O'Neil, Milwaukee, an an attorney working on the D Rance suits, said additional pro ceedings against Mr. John may b filed.

The suit against PaineWebbe and Mr. Sarnoff alleged tradin abuses on gold commodities.

Corporate Finance

Midwest retailer hires N.Y. firm for IPO

By Barry B. Burr

CHICAGO — When Lands' End Inc. went looking for investment banking firms to manage its planned initial public offering, investment banks in Chicago and the rest of the Midwest weren't even considered, much to their consternation.

Among those ignored by the mail-order merchandiser was Robert W. Baird & Co., Milwaukee, which handled Lands' End's only private placement, a $10 million 12⅞% note, still outstanding.

According to some of the investment bankers involved and other sources, Lands' End, based in Chicago and operating from Dodgeville, Wis., invited presentations from only four firms, all of them New York-based — including Salomon Brothers Inc., Merrill Lynch Capital Markets Inc. and Goldman, Sachs & Co. — before selecting Kidder Peabody & Co. as the sole manager for the 2.1 million-share offering.

Kidder is aiming to sell the offering the last week of September or first week in October at an estimated $31 to $33 a share.

The estimated $67 million offering would be the biggest IPO Kidder has managed this year, according to IDD Information Services Inc., New York. In the eight previous IPOs it managed or co-managed this year, Kidder raised a total of $188.2 million, according to IDD.

Kidder's largest IPO underwriting was $54.4 million for American Cablesystems Inc., Beverly, Mass. Kidder was co-manager of that deal in May with E.F. Hutton & Co. and Drexel Burnham Lambert Inc. The largest IPO for which Kidder was sole manager was the $30.5 million Harleysville Group Inc., Harleysville, Pa., offering, also in May.

Lands' End's estimated price per share is unusually high for an initial public offering, investment bankers and others not involved with the offering said.

Lands' End's price, estimated by Kidder in the 36-page preliminary prospectus at $31 to $33 a share, would be one of the highest for an IPO this year. Only two IPOs have sold at more than $30 a share this year, according to IDD.

Harleysville National Corp., Harleysville, Pa., underwritten by W.H. Newbold's Son & Co., Philadelphia, sold at $30.50 a share, raising $4.4 million; and Morgan Stanley & Co., New York, underwritten by its investment banking unit, sold at $56.50 a share, raising $163.8 million.

(Harleysville Group is an insurance company and has no connection with Harleysville National, a bank holding company.)

In terms of total proceeds, however, 47 other IPOs this year raised at least $60 million each.

At an estimated $32 a share, the Lands' End price carries a multiple of 28.3 times over pro forma earnings of $1.13 a share, for the year ended Jan. 31. In the six months ended July 31, it reported earnings of 27 cents a share compared with 30 cents a share in the same period last year. An estimate of fiscal 1986 earnings was unavailable, although the company's prospectus noted the seasonal nature of its sales, recording 40.5% to 54.5% of its net income in the fourth quarter in each of the past three years.

Executives at the company specializing in "yuppie" apparel and yachting supplies declined to comment on the offering.

Speculating on why Lands' End interviewed only national firms to manage its IPO, Perrin Long, an analyst at Lipper Analytical Securities Corp., New York, said, "A $60 million deal for a regional firm is too big.

"Normally, regional firms don't try to handle (alone) deals in excess of $25 million.

"It's not too much for a regional firm to co-manage. It's a lot for Chicago firms to manage singly."

"Baloney," responded E. David Coolidge III, partner and manager-corporate finance, William Blair & Co., Chicago.

He noted two other large IPOs for which Blair was co-manager, the $120 million Pearle Health Services Inc., Dallas, in 1983 with Goldman, Sachs, and the $21 million Western Publishing Group Inc., New York, last April with PaineWebber Inc. and Drexel Burnham Lambert.

"If we can handle a half of $12 million or a third of $210 million, I don't know why we couldn't handle all of $60 million," Mr. Coolidge said.

"We would be happy to take it on all alone.

"When you don't have the chance to make the pitch, it's pretty hard to make the case for your qualifications."

Peter G. Banzhaf, senior vice president of Robert W. Baird, the Milwaukee investment banking firm, also expressed disappointment about being passed over by Lands' End.

"We just weren't given the opportunity," he said. "It looks like an attractive offering."

Baird handled Lands' End's $1 million private placement in 1983. According to the prospectus, the note is payable in six equal annual installments, beginning in 1988.

A regional investment banker who asked not to be named said, "We were obviously extremely disappointed . . . we were not asked to make a presentation.

"We don't have any reason why we were not asked."

He said he believes his company could have managed the deal alone.

He said companies with regional presence frequently invite regional firms to co-manage the offerings.

Continued on page 4

Aftermarket performance of IPOs managed by Kidder Peabody
Jan. 1 — Sept. 15, 1986

Issuer	Total initial value ($ millions)	Initial price per share	Aftermarket performance: price per share (9/15)	Aftermarket performance: % change in price
American Cablesystems*	$54.4	14½	13⅜	−6
Harleysville Group	30.5	16¼	15¾	−3.1
Perception Technology	21.6	18	15¼	−15.3
Genzyme*	28.3	10	9½	−5
Groundwater Technology	18.5	18½	22½	21.6
Geonex	8.2	8	8¼	3.1
Stars to Go*	22.2	12	12	0
Marble Financial	4.5	14	18½	32
			Total change in value**	−1.8

* Indicated Kidder was lead co-manager; otherwise Kidder was sole manager.
** Total current value of all shares divided by total initial value (number of shares not shown in table).
Sources: IDD Information Services Inc., New York, and newspaper quotes. Calculations by *Pensions & Investment Age*.

Toy makers ready to play Wall Street's game

By Brad Rudin

A 1.2 million-share offering by Lewis Galoob Toys Inc. last month showed toy companies, used to reacting to the demands of the toy market, now also are reacting to the demands of the capital markets.

At the same time, the offering by the relatively immature company is an indication that Wall Street's perception and acceptance of toy companies are changing.

The Galoob offering was only one of several in the past six months by toy companies — the beneficiaries of a baby boom — seeking to insulate themselves from the risks long associated with the industry by broadening their product line and strengthening their balance sheets.

The lure of those goals encouraged Galoob to make its public stock offering last month, said Dennis McGill, the company's chief financial officer. The South San Francisco-based company sold the 1.2 million shares to the public for proceeds of at least $17 million.

Changes in the toy industry combined with a bigger market have made equity and debt offerings by the sellers of playthings more welcome on Wall Street.

Still, some analysts say, the seasonal nature of the industry and the fickle market inject an added element of risk to toy company issues.

The industry has been growing more sensitive to the dangers posed by a narrow product focus, said E. John Rosenwald Jr., a co-president of Bear, Stearns & Co., New York, and a director of toymaker Hasbro Inc.

"The issue you raise is the issue that puts pressure on all toy company managements that are public to have a portfolio of products that does not depend heavily on one product," Mr. Rosenwald said.

Galoob reported net earnings of $118,000, or 2 cents per share, on net sales of $57.2 million in 1985. The previous year, Galoob reported net earnings of $5.7 million, or 86 cents per share, on sales of $54.2 million.

While the company earned $7.9 million from operations in 1984, it suffered a $310,000 loss from operations in 1985 when sales from one of its dolls wasn't as high as expected.

Operating expenses increased to $28.1 million in 1985, up from $19.3 million the previous year.

The offering will enable the company to widen its line of merchandise and boost sales, Mr. McGill said.

"When you're trying for growth in the toy business, product is king."

"We felt that to maintain the high level of growth of our goals, getting a little more capital . . . was a good move," Mr. McGill said.

Galoob also might use the proceeds to

Continued on page 4

The toy industry's top three

Company	Net sales ($ millions) 1985	Net sales ($ millions) 1984	Net earnings (loss) ($ millions) 1985	Net earnings (loss) ($ millions) 1984	Net earnings (loss) per share (dollars) 1985	Net earnings (loss) per share (dollars) 1984	Long-term debt ($ millions) 1985	Long-term debt ($ millions) 1984	Stockholders equity ($ millions) 1985	Stockholders equity ($ millions) 1984
Hasbro Inc.	$1,200	$719	$99	$52.4	$3.55/diluted	$2.54/diluted	185.7	127.5	417.9	290.8
Mattel Inc.	1,000	880.9*	78.7	85.6*	1.42	1.60*	289.6	186.4	198.1	126.2
Coleco Industries	776	774	64.2**	−79.8	3.87**/primary 3.17**/diluted	−4.95/primary	149.9	133.7	102.4	10.5

* Represents unaudited pro forma summary of operations for the year ended Dec. 29, 1984 as if the capital investment and exchange offer transactions had taken place on the first day of the year.
** Excludes extraordinary credit resulting from tax loss carryforwards of $18.7 million, or $1.13 per share primary, and 88 cents per share fully diluted.
Source: Company annual reports

Ready to play . . .

Continued from page 39

finance licensing agreements. Many of the company's products, such as The A-Team and Mr. T, are marketed under license from the trademark holder. Other licenses could be bought in the future, he said.

In addition, the company is considering a move into the production of television programs featuring Galoob products, Mr. McGill said.

Finally, the equity offering paves the way for Galoob's plan to become a much bigger company. The offering provides cash without adding debt to the balance sheet.

"We believe that we are going to have some acquisitions. And it was my wish to keep the debt side of the balance sheet clear. We have no long-term debt at all," Mr. McGill said.

Issuing equity is a "double-edged sword," Mr. McGill said. "It's a very valuable thing if you are doing well. But at the same time if you're not doing well, it can hurt you."

Worlds of Wonder

Worlds of Wonder, which went public in June, expects to use about half of the $66.7 million in proceeds for repayment of debt. The other half will be used to satisfy general working capital requirements or to repay bank debt incurred for working capital.

"We were a one-product toy company last year," said Richard B. Stein, the chief financial officer at the Fremont, Calif.-based company that produces the Teddy Ruxpin talking bear. "This year, we're a six-product company. Obviously starting out at a small base we have room to grow more easily than the established companies."

The first quarterly report issued by the company, for the three months ended June 30, shows a net loss of $1.3 million, or 7 cents per share, on net sales of $23.5 million. Sales are not reported for the same period last year, but the report puts the net loss at $1.7 million, or 9 cents per share.

For the fiscal year ended March 31, the company reported net income of $8.1 million, or 43 cents per share, and net sales of $93 million.

Worlds of Wonder expects to tap the public markets again in the future, Mr. Stein said. "Obviously, we feel that our company with its rapid growth rate — one that we believe we can sustain — will need to go back to the market from time to time if we can continue to grow."

The company is creating a solid foundation for itself by diversifying into several areas, said Louis J. Paglia, an associate at Smith Barney, Harris Upham & Co., New York, which acted as the lead manager in the initial public offering. Mr. Paglia pointed to the company's plans to license Teddy Ruxpin pajamas and create television programs based on Teddy Ruxpin and Lazer Tag, another Worlds of Wonder product.

Because the larger toy companies are solid and diversified, they get equal treatment in the equity markets, said Susan Humphreville, a vice president at Drexel Burnham Lambert Inc., Beverly Hills, Calif. Drexel has underwritten offerings for Hasbro and Mattel Inc. "I don't think there is a discount that you would automatically apply to being in the toy business," Ms. Humphreville said.

Tyco Toys Inc.

Tyco Toys Inc., which issued convertible debt last month, is attractive to investors because its business is based on well-established product lines, said Greg Berlacher, an assistant vice president at Advest Inc., Hartford, Conn., the lead underwriter for the convertible issue.

Tyco, which is based in Moorestown, N.J., sells electric trains, car racing sets and building blocks.

Holders of the 8% convertible subordinated debentures due 2001 can convert to stock when Tyco shares, which traded at 7⅛ when the deal was priced in August, reach 8¾. Recently, it was trading around 6¾. The conversion premium is 18%.

Tyco reported net income of $2 2 million on sales of $65 million in 1985 and net income of $1.7 million on sales of $62.7 million in 1984. The company made an initial public offering in February.

Tyco's convertible debt received a B3 rating from Moody's Investors Service and a CCC+ from Standard & Poor's Corp. Both New York rating agencies cited the company's leverage in their rating reports. With the sale of the convertible issue, debt will stand at 70% of capitalization, according to Moody's.

Although concerned with the company's leverage, the Moody's report cited the Tyco's experienced management, stable core product line and growing market as positive factors.

Shed risky image

"For the first time in many, many years, a majority of the toy companies that are publicly traded are well received both by John Q. Public and the institutional investor," said David S. Leibowitz, an analyst with American Securities Corp., New York.

"The group has been carried along by the rest of the market and, in fact, has led the market for quite some time with very much widened price-earnings ratios," he said.

Toy company issuers have started to shed the risky image that plagued them in the past, industry insiders agreed.

"The old-time toy company used to be a one-product-type company and, therefore, there was a lot of risk in the one product going away with a change in consumer taste," said Walter D. Slavens, treasurer at Hasbro, the nation's biggest seller of toys. "That is the viewpoint that the capital markets have had up until recently."

Hasbro, Pawtucket, R.I., became one of the world's largest toy companies in 1984 when it acquired the Milton Bradley Co., which specialized in games.

The risks associated with obsolescence can be contained by broadening the product line, Mr. Slavens said. "The biggest difficulty that any company has in the capital markets is trying to get that point across."

Coleco Industries, the maker of the Cabbage Patch dolls, has been trying to reduce its dependence on this product line, said Michael S. Schwefel, general counsel at the West Hartford, Conn.-based company. He pointed to Coleco's purchase earlier this year of Selchow & Righter Co., the makers of Scrabble, and Leisure Dynamics Inc., which sold toys, games and books.

Population and retailing trends are positive factors for toy companies seeking access to the capital markets, said Mr. Rosenwald of Bear, Stearns.

A year-round market

In addition, recently established toy supermarkets such as Toys 'R' Us provide sellers with a year-round outlet for their goods.

Prospects for a more even sales cycle can be overstated, said Michael G. McCafferty, the treasurer at Mattel, Hawthorne, Calif. "In spite of our long-range strategy to make toys a year-round business, there will always be a Christmas in the fourth quarter," he said.

Issuers of securities in the toy industry have good news to tell investors during road shows, Mr. Rosenwald said. "You go into the demographics, you go into the specialty retailers and show if you have a broad list, it's a damn good place to have your dough."

Merrill Lynch Capital Markets, New York, analyst Harold Vogel offered a less bullish estimate of the industry, saying projections of modest growth limit Wall Street's appetite for toy company issues. "If you're growing at 3% to 5% domestically, you're not showing above-average growth, so why should capital be attracted to it?"

Mr. Vogel discounted the industry's market growth claims and the stretching of the sales cycle through the year. "It's a damn tough business to be in."

Consolidation a plus

Consolidation holds promise for the toy industry, according to a report issued by the U.S. Department of Commerce. "Mergers, acquisitions and divestitures are producing a more concentrated industry composed of larger and stronger companies."

This trend means more toy companies will seek access to the capital markets for financing, said Laurie A. Lively, an analyst at Oppenheimer & Co. in New York.

The price-adjusted value of toy shipments in the United States is expected to increase by 1.8% this year, according to the Commerce Department. "This year has been a soft year," said Douglas Thomson, president of the Toy Manufacturers of America, the New York-based trade association.

"Retailers have been rather chary about putting too much inventory in. We really haven't had the hot products we had with Cabbage Patch, Transformers and Trivial Pursuit. So I'm inclined to think that we'll be rather flat compared to last year."

At Smith Barney, analyst Terry McEvoy offered another view. "I think the outlook for Christmas sales of toys is terrific."

But toy industry sales are notoriously hard to predict, said Mr. Leibowitz of American Securities. "This is a very faddish business. He who had the hot hand last year may not have the hot hand this year." ■

Trading sought

CHICAGO — The Chicago Mercantile Exchange has applied with the Commodity Futures Trading Commission for permission to trade, in Chicago, a futures contract on the Nikkei 225 index of Japanese stocks.

The proposed contract is identical to the Nikkei 225 futures contract introduced Sept. 3 at the Singapore International Monetary Exchange. The Singapore exchange has a sub-licensing agreement with the Mercantile.

The Nikkei is an index average of the prices of 225 of the 1,000 issues listed on the Tokyo Stock Exchange, the second largest equity market in the world. ■

New issues of corporate securities

Sept. 1 — Sept. 12, 1986

Issue date	Company	Amount ($ mil.)	Type of security	Offering price Debt (%) Share ($)	Gross spread as % offer price	Where traded (to list)	Managers
Debt							
9/9	City of Memphis	400.00	Bonds	100.00%	1.158	OTC	Drexel Burnham/Howard, Weil, Labouisse, Friedrichs/Morgan Keegan
9/12	System Energy Resources	300.00	First Mtg.	100.00%	—	OTC	Morgan Stanley/First Boston/Merrill Lynch/Salomon
9/10	First Brands Corp.	300.00	Sr. Sub. Db.	100.00%	3.500	OTC	First Boston
9/12	System Energy Resources	250.00	First Mtg.	100.00%	—	OTC	Morgan Stanley/First Boston/Merrill Lynch/Salomon
9/9	Ford Motor Credit Co.	250.00	Notes	99.70%	.451	OTC	Merrill Lynch
9/12	System Energy Resources	200.00	First Mtg.	99.00%	—	OTC	Morgan Stanley/First Boston/Merrill Lynch/Salomon
9/11	Federal National Mortgage Assoc.	198.00	Mtg. Backed	Market	Market	OTC	Goldman, Sachs
9/10	Ambassador General Partnership	175.00	Mtg. Notes	99.75%	3.008	OTC	Salomon
9/9	Houdaille Holdings Corp.	175.00	Sub. Notes	Market	Market	OTC	Salomon
9/12	Anderson Clayton & Co.	150.00	Sr. Sub. Note	100.00%	3.000	NY	Prudential-Bache Securities
Common Stock							
9/4	Sears, Roebuck & Co.	331.90		$44.25	3.28	NY/MW/PC	Dean Witter Reynolds/Goldman, Sachs (books)
9/3	Columbia Gas System*	51.70		$41.38	0.41	NY/PH/TOR	Prudential-Bache Securities
9/3	Global Growth & Income Fund	50.00		$10.00	7.00	IPO (NY)	First Boston/A.G. Edwards/Nikko Securities International
9/11	Weingarten Realty	36.50		Market	Market	NY	Goldman, Sachs/Alex. Brown & Sons/Merrill Lynch/Rotan Mosle
9/4	Canonie Environmental Services	26.30		$15.00	6.67	IPO	Kidder Peabody
9/5	QVC Network	25.00		$10.00	8.00	IPO	Furman Selz Mager Dietz & Birney
9/11	Boulevard Bancorp	23.40		$18.00	6.67	IPO	Goldman, Sachs/Wm. Blair
9/11	Guest Supply	17.10		$18.00	5.56	OTC	Kidder Peabody
9/10	P.A.M. Transportation Services	16.90		$11.25	7.02	IPO	Robinson-Humphrey
9/11	Victoria Creations	15.00		$11.50	6.96	IPO	Shearson Lehman Brothers

Source: Securities Data Co., New York
**Competitive*

First mtg.: First mortgage bonds
Sr. sub. db.: Senior subordinated debentures

MW: Midwest Stock Exchange
NY: New York Stock Exchange
OTC: Over the Counter
IPO: Initial Public Offering
PC: Pacific Stock Exchange
PH: Philadelphia Stock Exchange
TOR: Toronto Stock Exchange

Letters to the editor

Dedication dangers

To the Editor: The article, "Bakery Drops Dedication, Slices Pension Cost," (*Pensions & Investment Age*, June 23), perpetuates some dangerous misconceptions about dedicated portfolios. I'm sure some of the statements and thoughts expressed go through every plan sponsor's mind at some point. Because this article represents an extraordinary collection of red herrings about dedicated portfolios and their management, I wanted to comment on all of these thoughts at once.

The most dangerous of the thoughts expressed is that "good" absolute total returns of a dedicated portfolio can somehow be translated into better funding of a plan's liability. A fixed-income portfolio manager has no business discussing either of these topics. Absolute returns are irrelevant for a dedicated portfolio and plan "funding" is the sponsor's prerogative.

A dedicated portfolio's size and structure is defined as whatever is necessary to generate cash flows to fund a selected portion of the plan's benefit payments. The sponsor picks those payments. The portfolio management method should focus on adding incremental return to the portfolio designed and constrained by the sponsor's asset allocation needs. By definition, interest rate anticipation strategies for total return change a portfolio's maturity and volatility.

Also by definition, these kinds of strategies violate the constraints of a dedicated or immunized portfolio. A bond portfolio can do one thing or another. It can aim for big total returns or maintain the constraints of funding a defined benefit, but it can't do both simultaneously. Imagining that it can leads to the sort of self-delusion described in the article.

No more dedicated than before

A "Let me pull a rabbit out of my hat" misdirection in the article hides the basic fact of life of dedicated portfolios. The future cash flows generated by any portfolio are exactly the same whether the portfolio is priced in the 14% market of 1984 or today's 8% market.

A coupon payment of $1,000 in February 1996 to meet a $1,000 benefit payment in April 1996 is the same as a coupon payment of $1,000 in February 1996 to meet . . .

The 40% and 50% total return of the portfolio which generates the coupon payment may seem astounding. For a properly constructed dedicated or immunized portfolio, the return exactly matches the 40% or 50% rise in the current cost of funding the plan's projected benefit payments using currently available investment returns. Expected returns of 12% or 14% just aren't easy to come by these days.

The dangerous misconception is that the dedication can be put in place, left for a while, and then removed when some "added benefit" has appeared because of the sharp decline in interest rates. Dedication's purpose is to immunize out the effects of interest rate changes. Because interest rate risk is nullified and changes cannot hurt the portfolio, how can rate changes create an added benefit? They can't. Once a dedicated portfolio is established it is never more or less dedicated than on the day it was created. It will always continue to perform its originally intended task of generating cash flow to make benefit payments.

A bit of cheating

There is a plausible explanation for why a decline in interest rates might have created an "added benefit" in the dedicated portfolio described in the article.

The reason is that portfolio might not have been exactly dedicated and that the manager may have been cheating (just a teeny bit) on the constraints of the portfolio.

Back in 1984, when interest rates seemed extraordinarily high, and the yield curve still had a very steep positive slope, the manager might have felt just a little bit bullish. "Interest rates will probably decline," he said and built a little bit of extra interest rate sensitivity into the dedicated portfolio. This shifted the asset-liability match off center.

We refer to this as creating a duration mismatch. If interest rates went down, the asset portfolio would have a greater increase in market value than the increase in the cost of funding the benefit payments (and that is what seems to have happened). Conversely, if interest rates went even higher, the portfolio value would have declined faster than the liability cost.

An extra bit of interest rate risk might have been part of the plan for the portfolio and controlled by the manager. A dangerous self-delusion would be that the portfolio was truly dedicated and had no interest rate risk. A dangerous misconception is that the reward was worth the risk.

The rhetorical question is "Why take any risk in bonds?" Interest rate anticipation is not a consistent method of creating superior returns. In the long run, stocks beat bonds. Bonds have the one advantage of being particularly suited for generating cash flow. Cheating on dedication constraints serves only to foul up that useful capacity of a fixed-income portfolio. It is not even an efficient way to time the market. If the manager was really that bullish, why didn't he have a portfolio of long zero coupons, or stocks for that matter?

There is no question about the manager's opinion now. The portfolios have been liquidated to cash. The interest rate mismatch is now squarely on the short side. A pension fund cannot get any more bearish. The portfolio is also very far away from generating the benefit payments on schedule with certainty.

Black magic

The actuarial treatment of the plans is the final bizarre element in this case. It seems hard to believe that, after the greatest interest rate decline in history, the actuary would raise the investment return to 11%; a return higher than the previous estimate, higher than is currently available on dedicated portfolios, and certainly higher than is available on the short-term investments currently held by the plans.

The answer must lie in the actuarial treatment when the dedicated portfolios were created. At that time, the assets and a selected group of liability payments are exactly matched off. Whatever rate equates the present value of the liability to the cost of the assets at the time the portfolio is originally purchased determines the investment return for as long as the dedication stays in place.

This rate may or may not have been used to adjust the actuarial assumptions about the overall program. An actuarial "gain" can be realized at any time because of the asset-liability match.

The kind of "pie in the sky" described in the article (if you will excuse the pun) represents common misunderstandings about processes as complicated as asset allocation, actuarial valuation, and dedicated portfolio management.

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Our philosophy is that dedicated portfolios provide a framework for understanding the impact of different asset structures and provide a sensible purpose for bonds within that structure. The purpose for bonds is not superior total returns. Instead, they are very useful for providing liquidity and cash flow without regard for interest rate movements. On top of that, as portfolio managers, we try to provide whatever incremental return the market will allow.

Issac N. Frankel
Vice president
Minton/Newbold's
Capital Management
Philadelphia

Bank of Montreal

To the Editor: Attached is a profile on Bank of Montreal cash management services.

While the oversight (of missing the July 21 cash management directory) is regrettable, we appreciate your assistance in addressing the matter in this fashion.

Your attention to this matter is appreciated.

Bank of Montreal Cash Management Services is located on the 22nd floor, First Canadian Place, Toronto, Ontario M5X 1A1. With an on-line realtime branch network of more than 1,200 locations coast to coast, it offers a full range of premier cash management services.

Standard transactional products include: wholesale lockbox through any major Canadian city; electronic cash concentration with full reporting detail; zero balancing (both regular and tiered); terminal-initiated wire payment and stop payment; pre-authorized payments (electronic and paper-based); direct deposit (or debit); and account reconciliation.

Bank of Montreal offers a full range of terminal-based transaction and information services based on customer interactive on-line access to his U.S. dollar or Canadian dollar accounts. Services include on-line balance or history inquiries, on-line funds transfer, on-line third-party payments and on-line investment in a special investment account. We recently have introduced on-line initiation of documentary credits.

Additionally, our merger with Harris BankCorp of Chicago has enabled our two organizations to develop some unique products for the North American market. Specifically, Bank of Montreal has linked its EFT system to the ACH network allowing debits and credits to be made at any financial institution (limited only by ACH membership) in either country regardless of point of origin. Our combined lockbox capabilities enable either organization to provide full service to customers with receivables in either country.

Benjamin Applebaum
Senior product manager
Bank of Montreal
Toronto

Explain lump sums

To the Editor: Concerning your "Washington" report on the issue of lump sums, Aug. 18, you should be specific with the issue of "lump sums."

The points made seem to deal with the issue of lump sums at retirement, early or normal, and for purposes of the "administrative cash out language" that is often found in plans to eliminate the necessity of carrying long liabilities for small amounts.

In plan terminations, it has been our experience that a plan consultant, actuary, or attorney for the employer, often specifies that lump sums will be available to all terminated vested and active lives of the plan. Obviously, the issue becomes one of a financial consideration.

We also advocate the purchase of annuities that entitle employees to benefits as prescribed by the plan for all benefits accrued to the date of termination. We often mandate the insurer to cover "the smalls" to alleviate the dissension, provide benefits that have been accrued, and retain the objective of management which is usually: optimize the reversion.

It appears the employer is always paying more. To us, it does not make sense.

Experts get large fees, plan sponsors pay more money and participants generally squander the cash.

The ultimate results seem to conflict severely with overall objectives of the plan sponsor in the first place.

Plan sponsors and practitioners need to be aware of these opportunities in plan closeouts as opposed to normal, early, or termination benefits.

Joseph B. Bellersen Jr.
President
The New York GIC Exchange
Cincinnati, Ohio

Not so simple

To the Editor: Your Sept. 1 editorial regarding simplifying Form 5500 reporting which, incidentally is not limited to pension plans but covers group insurance programs as well, deserves serious consideration. However, two observations:

Letters to the editor

1. Hopefully, simplification will not be comparable to the tax simplification we are about to experience.

2. No matter how much you simplify it, there will be no achievement of the original goals of the Congress to catch the rascals.

Why? I quote the President's Commission on Organized Crime: "The Department of Labor pays $2.3 million yearly to the IRS to process the forms (5500s). However, review of the 5500s is such a low priority at the IRS that information is not sent to the Office of Pension and Welfare Benefits until at least 18 months from the date of filing by the benefit plan.

"Since there is a three-year statute of limitations on bringing criminal cases for false reporting, OPWB often decides not to investigate cases if the delay caused by the (Internal Revenue Service) results in a potential statute of limitations problem."

Need more be said?

Warren F. Jones
President
Hehr International
Los Angeles

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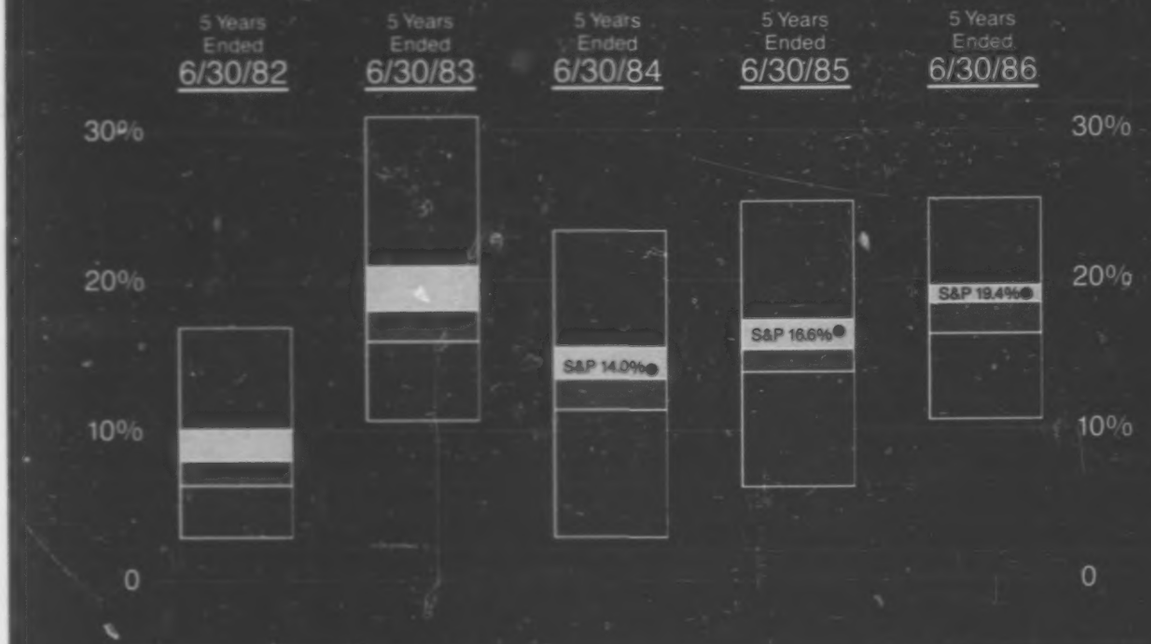

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Benefit plans widespread among small firms

GREENWICH, Conn. — Nearly seven in 10 small companies have some type of employee benefit plan even though accounting and government reporting requirements continue to change, a new study shows.

But despite their aggressive day-to-day style of doing business, small companies invest plan assets conservatively, according to Greenwich Associates, which released the study based on interviews with more than 12,000 executives.

The larger the company, the greater the likelihood it will have a plan, the study found, with profit-sharing plans the most popular type.

"With a majority of small companies already offering some type of employee benefit plan, it is only a matter of time before this segment becomes a more visible target market for investment mangers and other suppliers of employee benefit services," predicted Rodger F. Smith, a partner at Greenwich.

Of companies with annual sales of $20 million to $50 million, 80% had employee benefit plans. Among companies with sales between $10 million and $19 million, 71% had plans. For those with $5 million to $9 million in sales, 61% had employee benefit plans.

As for investments, small plans were very risk-averse in their asset allocation.

"Given the entrepreneurial management style of most companies, it is ironic that their employee benefit fund assets are invested so conservatively," commented Mr. Smith.

Two-thirds of present assets are invested in fixed-income securities, including marketable bonds, guaranteed investment contracts, and cash and short-term securities, while only about one-third are invested in common stocks and equity real estate.

During the next three years, common stock investments are expected to increase two percentage points, to 27.5% of assets; marketable bonds should rise 1.2 points, to 18.2%; and real estate investments should be up 0.9 points, to 5.8%, the study predicted.

At the same time, investments in cash and short-term securities are expected to decline more than four percentage points, to 22.5% in response to "the continuing softness in interest rates," the report noted.

Assets allocated to GICs are expected to remain virtually unchanged at 21.8%.

As for the type of plan used, profit-sharing plans are most popular, with nearly 40% of all companies surveyed using them, especially those in the wholesale durables industry and larger companies.

Pension plans are second in popularity. Twenty-eight percent of all companies surveyed have pension plans, with 36% of the larger companies using them.

Twelve percent of companies use both pension and profit-sharing plans, while only 8% use saving or thrift plans.

In aggregate, 14% of all small companies use 401(k) plans, with well above-average use by larger companies and business services and machinery and metal fabricating industry groups.

In general, employee benefit plans afford the larger of the small companies "an attractive way to retain quality employees. Bigger companies have to institutionalize benefits — that causes them to use employee benefit plans, particularly 401(k)s," Mr. Smith said.

Assets invested in employee benefit plans are small, the study found, with the average company reporting assets of $1.4 million.

For the largest of the small companies — with sales of $20 million to $50 million — plan assets average $2.6 million.

The smallest companies, with sales of $5 million to $9 million, report average plan assets of $732,000. ■

Use of employee benefit plans by small companies*

Company size	Profit sharing	Pension	Pension/ profit sharing	Savings or thrift	401(k)	IRA	Jointly trusteed	Other
$20 - 50 million	45%	36%	15%	11%	23%	15%	5%	2%
$10 - 19 million	42	30	13	8	15	13	5	2
$ 5 - 9 million	35	23	9	7	8	12	3	1
Total companies	**39**	**28**	**12**	**8**	**14**	**13**	**4**	**2**

* Based on companies with a plan.
Source: Greenwich Associates, Greenwich, Conn.

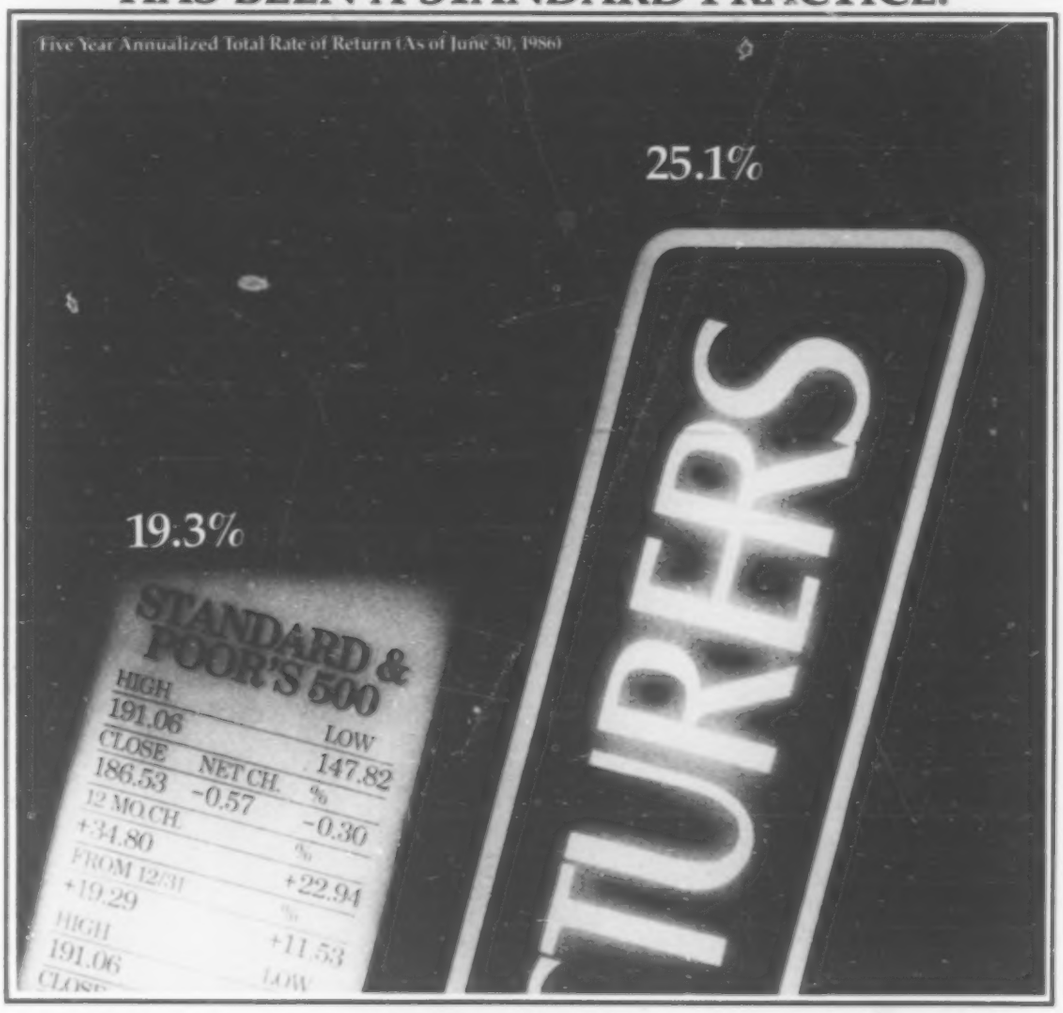
Indiana vote set on diversification

INDIANAPOLIS — Voters in Indiana will decide Nov. 4 whether state pension funds, now restricted to fixed-income investments, will be able to diversify.

A question on the general election ballot will ask voters if they favor rescinding an article of the Indiana Constitution that prohibits the state from being a shareholder in any company. If this article is rescinded, state pension funds would be able to invest in stocks and other equity-oriented investments such as real estate and venture capital.

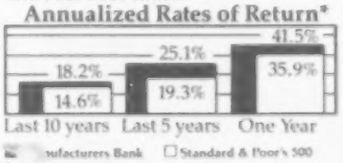
If rescission is approved, the Legislature would have to ratify the decision when it reconvenes early in 1987. ■

AT MANUFACTURERS, OUTPERFORMING STANDARD AND POOR'S HAS BEEN A STANDARD PRACTICE.



For the past 10 years, Manufacturers' Equity Fund for employee benefit accounts has consistently achieved a higher rate of return than the Standard and Poor's 500 Index.

Annualized Rates of Return*



* As of June 30, 1986.

For most banks, this consistency would be unusual. For us, it's been a standard practice.

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Data: SEI Funds Evaluation Services, an independent service. Market conditions fluctuate and these figures are not an indication of future results. The S&P 500 Index is a registered trademark of the Standard & Poor's Corp., New York, N.Y.

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ERISA falling short . . .

Continued from page 8

the Report of the President's Committee on Corporate Pension Funds in 1965 and the idea "was apparently the brainchild of the United Auto Workers, whose president (Walter P. Reuther) held a seat on the committee."

The UAW and the United Steelworkers of America were two of the most vocal supporters of the insurance idea, Mr. Ippolito said.

He said the termination of the Studebaker Corp. pension plan in 1963 stimulated interest in a federal pension insurance program. Available data, however, didn't show the Studebaker termination was part of an overall pattern, he said.

In 1973-'74, however, terminations did increase and they remained high through 1981. This surge was related to the dramatic collapse of the stock market in 1973-'74 that "sharply increased the economic burden of pension plans which, in turn, led to higher levels of termination activity."

Mr. Ippolito argued the Pension Benefit Guaranty Corp.'s insurance program is set up "as if its main design is to effect transfers to a favored few; and that the remainder of the pension population is included for the sole purpose of effecting the promised transfers."

Among the features inconsistent with the notion the PBGC is a bona fide insurance company are:

- Participation is mandatory — large, healthy, well-funded companies, who pay most of the premiums, are forced to participate.
- Premiums are not risk related. Companies that are 300% funded (in a legal sense) and are in healthy and growing industries pay the same premiums as those that are 10% funded and are in dying industries.
- Companies hold options against the PBGC and can "put" their underfunded pension liabilities to the PBGC.
- Companies can obtain funding waivers at will.

In addition, Mr. Ippolito said, there was no evidence the supposedly stricter funding rules of ERISA had changed funding behavior by pension sponsors.

He noted "virtually all systematic underfunding in private pension plans in the United States is attributable to underfunded plans covering unionized participants."

The probability that a plan sponsor company would fail was 200% higher for companies that were 100% unionized than for plan sponsors in general, Mr. Ippolito said.

"Thus, union plans are not only relatively underfunded, they also have a significantly higher chance of failing," Mr. Ippolito said. "The data show that the combination of underfunding and poor financial performance actually results in union plans more often receiving PBGC transfers."

Mr. Ippolito said the 100 largest insufficient terminations have accounted for approximately 90% of the PBGC transfers, and almost 95% of the money transferred in these largest terminations has been claimed by union participants.

Ironically, the data show that after the passage of ERISA, union plans *reduced* their contribution rates.

These results are consistent with the theory that underfunded pension plans may play an important economic function in the company, Mr. Ippolito said. They may bond the unionized work force, giving union workers a stake in the long-term viability of the company.

While PBGC insurance weakened the value of this bonding, shareholder opposition to it was further reduced by the PBGC guarantee being assessed against taxpayers and participants as a whole and not against the shareholders; that shareholders had the ability to "put" the obligation to the PBGC; and that funding waivers could be obtained.

As a result, ERISA, through its insurance provisions, awards a wage subsidy to dying companies and provides an incentive to viable companies to switch to defined contribution plans, said Mr. Ippolito.

Unless the political forces responsible for the legislation have somehow been altered markedly since 1974, an unlikely condition, "it is hard to see how meaningful change in the pension insurance rules can be affected," Mr. Ippolito concluded. ■

Corrections & clarifications

Continued from page 10

qualified pension plans; CEREF II will be offered to qualified pension plans.

CIGNA uses an aggressive management style to create value in individual properties.

The staff works with each of its portfolio managers to develop long-range plans.

Day-to-day management is handled by on-site independent firms supervised by the in-house group.

CIGNA clients include State of Connecticut Trust Systems, Ford Motor, Warner Lambert and Alaska Permanent Fund.

Joel Stoesser, vice president and portfolio manager, is in charge of making property investments.

Tom R. John, senior vice president, is the client contact.

- An article in the July 21 issue on net worth provisions that can prompt accelerated redemption of high-yield bond issues cited a Morgan Stanley & Co. research report listing **Ambrit Inc.**, Clearwater, Fla., as being close to the threshold that would require the company to begin stepped up redemption of 12¾% senior subordinated debt issue maturing in 1996.

The company was cited as having a $21 million net worth, while the bond issue's net worth covenants would require the company to begin accelerated redemption if its net worth, defined as consolidated stockholders equity, fell to $20 million or below.

The $21 million net worth was based on Jan. 31 financial statements of Ambrit. The bonds, a $50 million issue, were sold in March to help raise capital to complete Ambrit's acquisition of Wilbur Chocolate Co. As a result of the acquisition, Ambrit's first quarterly statements following issuance of the bonds showed a consolidated net worth of $42.3 million as of April 30, well above the required $20 million.

- The **United Air Lines Pilot Variable Plan** has $925 million in assets. The amount was reported incorrectly in the Sept. 15 issue.

Money movers appear in each issue of *Pensions & Investment Age*.

Please send information for the money movers section to:

Joanne Friedrick
P&I Age
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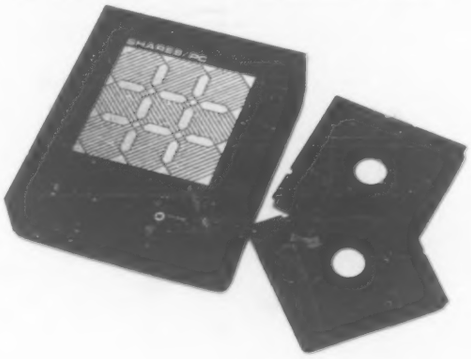

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Pensions & Investment Age

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Baby Bells take active role in real estate

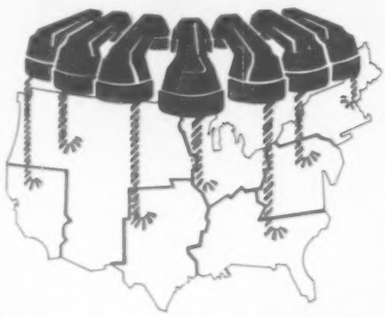
By Steve Hemmerick and Joel Chernoff

While real estate investing by most corporate pension funds has slowed to a crawl during the past two years, six regional Bell telephone operating companies have hired 23 real estate managers in that time.

Several of the "baby Bells" — the seven operating companies resulting from the divestiture of American Telephone & Telegraph Co. — have taken an aggressive track, plunging into separate accounts with some of the biggest names in the real estate advisory business. Others also have committed to closed-end pools, and one — BellSouth Corp., Atlanta — has yet to establish an individually tailored real estate program.

At the same time, the regional companies — who collectively control some $53 billion in pension assets — and AT&T, New York, are wrestling over the future of the $4 billion Telephone Real Estate Equity Trust. TREET is a 10-year wasting trust created Jan. 1, 1984 to hold real estate assets of the pension funds of AT&T and the regional companies.

While AT&T denies a breakup of TREET is in the works, pension and real estate sources say a meeting next month may lead to an agreement to ease withdrawal from the real estate fund by regional Bell funds seeking more control over their real estate assets (*see story on page 8*).



Certainly, the baby Bells' forays into real estate have created a giant competition to manage those assets. With most of the target allocations to real estate running from 10% to 15% of assets, more than $5 billion ultimately is at stake.

"Restructuring TREET will open up the sweepstakes again," predicted one real estate manager.

The hunt for good real estate, though, doesn't mean the regionals are throwing dollars at real estate now when many office markets are overbuilt, according to pension fund officials.

Instead, they have been establishing mostly separate accounts relationships and gearing up to invest further.

The separate accounts give the regionals the ability to earmark millions of dollars of assets for real estate, yet buy cautiously over time and not plunge into the market, according to a number of regional investment officers.

"We really don't do major market timing moves," explained Mary Beth Garrell, manager/trust investment management for U S WEST, whose fund is the only Bell fund known to have completely withdrawn from TREET.

As attractive properties come along, the managers can buy them, and real estate purchases aren't being forced, she said.

While U S WEST picked its first real estate managers as long as two years ago, two of the funds — NYNEX Corp., New York, and Southwestern Bell Corp., St. Louis — have just hired real estate advisers.

According to sources, NYNEX's $8 billion pension fund has picked Aldrich, Eastman & Waltch, Boston; Heitman Advisory Corp., Chicago; and John McMahan Associates, San Francisco, to run separate accounts. NYNEX officials declined to comment.

Southwestern Bell's pension fund, with about $5.5 billion in assets, has between 5% and 6% of assets invested in real estate,

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CORPORATE FINANCE: Activity was brisk as domestic new issues went over the $200 billion mark for the first nine months of 1986. Salomon Brothers continued to lead firms for the nine-month and three-month periods — page 25.

PUBLIC FUNDS: In an effort to avoid poor portfolio performance and to keep from missing out on potential investments, many public pension fund executives are creating new avenues to get around restrictive legislative guidelines — page 15.

HMO: The Harvard Community Health Plan, Boston, has grown gracefully from a small pension fund investing in guaranteed investment contracts to a mid-size fund with an actively managed balanced account — page 68.

Union charges misuse of assets

By Joel Chernoff

LOS ANGELES — The Amalgamated Clothing and Textile Workers Union has filed suit, charging that investor David H. Murdock illegally used the assets of the Cannon Mills retirement plan to boost his efforts to either take over or force "greenmail" payments from two companies.

One of those companies is Occidental Petroleum Corp., Los Angeles, which paid a $60 million premium to Murdock-controlled entities and the plan in 1984 to repurchase 4.8 million shares of Occidental stock.

A second charge asserts that, starting in 1984, Mr. Murdock used the pension fund to either help acquire or force a greenmail payment from Oakland, Calif.-based Kaiser Cement Corp. Mr. Murdock recently announced his plans to boost his holdings in Kaiser to 30% of its common stock.

In addition, the New York-based clothing workers' union alleged Mr. Murdock terminated the $59 million Cannon Mills pension plan last year to recapture some $25 million in surplus assets, as "part of an ongoing course of conduct" to use plan assets for his own purposes instead of those of plan participants and beneficiaries.

The union charged Mr. Murdock and members of the plan's investment committee failed to act solely in the interest of plan participants and as a prudent person would, as required by the Employee Retirement Income Security Act of 1974.

Mr. Murdock, who sold most of the assets of Cannon Mills Co., Kannapolis, N.C., to Fieldcrest Mills Inc., Eden, N.C., last year, said ACTWU's charges are "just another organizing tactic" by the union.

The union, which has lost 25% of its membership since 1979, lost a bitterly waged contest to organize Cannon Mill's workers a year ago by a margin of 63% to 37%.

"Now, one week before the law would permit them to begin another campaign, they are apparently starting with personal attacks against me, even though I no longer own Cannon," Mr. Murdock stated in a release.

A spokesman for the union said he knows of no plans to mount a new organizing campaign at Cannon.

For Mr. Murdock, the lawsuit represents the latest twist in his short history as owner of Cannon.

The 63-year-old, self-made millionaire from Los Angeles purchased the company in a $413 million leveraged buy-out in 1982, only to sell its largest division to Fieldcrest for $250 million late last year, as the textile industry nosed into a decline. Mr. Murdock held onto Cannon's real estate holdings, which Cannon reportedly valued at $150 million.

The union, which joined six plan participants, filed the lawsuit Oct. 1 in the U.S. District Court for the Central District of California.

The ACTWU charged that in August 1981, Mr. Murdock, through International Mining Corp., acquired more than 2.5 million shares of Occidental's common stock, and 700,000 shares of its preferred stock. International Mining and others affiliated with Mr. Murdock continued to acquire shares between that time and summer 1984, the union said.

In February 1982, however, Mr. Murdock was elected a director of Occidental under conditions barring him from acquiring more than 5% of the natural resource company's stock.

But to either force a takeover of Occidental or to press it to repurchase Murdock-controlled shares,

Continued on page 79

A GM assembly line worker

GM to save millions in payments

By Barry B. Burr

NEW YORK — General Motors Corp.'s decision to begin paying all of its 20,000 suppliers electronically will save the company hundreds of millions of dollars and likely will spur other corporations to stop making corporate trade payments by check.

General Motor's electronic payments system incorporates several notable features. Among them:

Cash management

• Company officials have set up a network of eight banks outside the automated clearinghouse to handle electronically payments and trade information.

• Working with the banks, GM executives designed the network to allow other banks to join and other industries to use it to send electronic corporate trade payments and trade information. Electronic Data Systems Corp., Dallas, a GM unit that developed the electronic system, plans to

Continued on page 78

Termination nears completion

Phillips taps new annuity

By Marci Baker

BARTLESVILLE, Okla. — Combining the new with the old, Phillips Petroleum Co. tapped so-called participating annuities along with more traditional annuities to complete the termination of its $1.5 billion pension fund late last month.

In doing so, the oil company joined a small, but growing list of corporate pension fund sponsors embracing the new kind of contract, which enables the pension fund to retain investment discretion over the assets backing the liabilities in the annuity.

Prudential Insurance Co., Newark, N.J., provided the contracts to Phillips.

The company recaptured about $380 million in surplus pension fund assets through the spinoff/termination. The recapture is expected to result in an estimated $155 million after-tax gain being posted in the third quarter.

Phillips plans to use the surplus pension assets to pay down debt of about $6.4 billion, most of which was incurred in March 1985, as part of a restructuring program designed to fend off hostile takeover bids. Officials have said Phillips should have between $5.5 billion and $6 billion in debt by year end.

To complete the asset recapture, Phillips split the $1.5 billion pension fund into two separate plans — one covering its approximately 15,500 active employees and the other covering its 14,000 retirees. (*Pensions & Investment Age*, June 23).

Assets exceeded total accrued liabilities by $505 million. However, Phillips elected to keep $125 million of that surplus in the new plan for active employees. The $380 million surplus that was being withdrawn was housed in the plan covering retirees.

That plan ultimately was terminated upon purchase of old-style annuities covering the company's pension obligations to retirees.

The participating annuity contract was established for the ongoing plan for active employees, said James Mulva, treasurer.

Mr. Mulva declined to comment on a breakdown of the value of accrued pension obligations, saying the final numbers were being computed now.

However, estimates at the time Phillips announced its spinoff/termination were that about $170 million in obligations had accrued to active employees while some $800 million had accrued to retirees.

The $170 million in active employee obligations would have been placed in the ongoing plan for active employees along with the $125 million surplus remaining with the fund.

Officials said Phillips chose to combine the two kinds of annuities in this fashion because it offered the most attractive pricing.

Participating annuities are finding increasing favor with corporate plan sponsors because the company gets an infusion of cash, plus it locks in payments for employee liabilities accrued to date.

The company also gets to benefit from any favorable actuarial and/or investment experience by using the participating annuities. It continues to house and have investment control over the assets covering liabilities.

As a result, it's possible to do a spinoff/termination and retain some, or all, of a fund's outside investment management talent or maintain an investment program with an equity orientation.

The purchase of traditional annuities typically has meant that fund assets would have to be concentrated in fixed income and be run by the insurance company

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Western Asset buyer narrowed to 2 firms

LOS ANGELES — Western Asset Management Co. reportedly will be sold by First Interstate Bancorp to one of two final bidders — including United Asset Management, Boston.

The sale of the Los Angeles-based, fixed-income money management firm was nearing completion late last week, but it had been talked about for at least nine months. Western had about $2.2 billion tax-exempt assets under management as of Jan. 1 (*Pensions & Investment Age*, May 19).

Although officials of the giant California bank holding company and of UAM declined to comment, numerous sources confirmed the deal — peddled by Merrill Lynch & Co. as selling agent — was drawing to a close. They said First Interstate's top management is selling Western Asset because they want to divest of non-banking financial services and because key investment staff members want to operate independently.

"What they want to do is banking, period," said one West Coast money manager familiar with First Interstate's strategy. He cited the holding company's decision to pursue a merger with ailing BankAmerica Corp. as proof that, "at this particular institution, the emphasis is on banking."

First Interstate's strategy is the opposite of that being pursued by many other large financial services companies, whose intentions are to diversify, in part, by gobbling up money management firms.

It also raises the possibility that First Interstate's interests in other money managers — including real estate manager Karsten Cos. in Los Angeles and Miami; dynamic hedging specialist Leland O'Brien Rubinstein Associates Inc., Los Angeles; and equity manager Harris, Bretall, Sullivan & Smith Inc., San Francisco — will be put on the auction block.

"I think everybody is up for sale from the financial services standpoint," said another West Coast money manager.

John Lundsten, executive vice president of Karsten, confirmed First Interstate is "re-examining its position" because of the offer to merge with Bank of America, but said his firm — wholly owned by First Interstate Investment Services, a unit of the holding company — is conducting business as usual.

First Interstate owns 20% of LOR, but bank executives have told LOR's principals, who own the remaining 80%, that they are

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Waiver pact payoff

PBGC may get chunk of LTV unit

By Richard Gillespie

WASHINGTON — The Pension Benefit Guaranty Corp. may become the owner of a $172 million chunk of LTV Aerospace and Defense Co., Dallas.

The PBGC's ownership of part of LTV Aerospace, triggered if the parent company terminates two Jones and Laughlin pension plans and the Republic Steel pension plan for hourly workers, would complicate the efforts of the parent company, The LTV Corp., Dallas, to emerge from Chapter 11 of the bankruptcy code.

It would do little, however, to help the PBGC, which is already reeling from the terminations of two pension plans formerly belonging to LTV, and which now seems certain to assume LTV's entire $2.4 billion unfunded pension liability.

LTV Corp.'s management hopes to hang on to LTV Aerospace and make it the cornerstone of the revival of the company.

But under a plan funding waiver granted last year, the Internal Revenue Service, on advice from the PBGC, agreed to waive the company's 1984 plan contributions for three plans in exchange for a secured interest in 100% of the stock of LTV Aerospace and Defense.

Termination of the plans would trigger the PBGC's claim against the LTV Aerospace and Defense unit. Investment advisers say the areospace and defense operation is worth at least $600 million, though LTV asserts it is worth much more.

"LTV clearly wants to hang in

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NISF studies direct trades to cut costs

The National Investment Sponsor Federation, a federation of regional pension executive groups, is studying whether pension funds could cut transactions costs by trading directly with one another.

The question is one of two being studied by NISF study groups, according to David Seidel, vice president-pension fund management at GTE Investment Management, Stamford, Conn., who has been named president of the NISF.

Mr. Seidel succeeds Myra Drucker, director-trust investments, at International Paper Co., New York, who stepped down because of the press of work in her new position at International Paper.

Mr. Seidel said the second NISF task forces will study performance-based fees and what form of performance-based fee structure would improve the relationship between sponsor and manager.

David Seidel

In addition, the NISF has scheduled its first sponsors-only conference in New York Feb. 5 and 6.

Mr. Seidel stressed only pension sponsor executives would be allowed to attend the conference, which would be structured to encourage participation by pension executives through a case-

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Most new accounts* 3rd quarter 1986

Firm	New accounts
John Hancock Apt. Fund	8
Interven Partners	8
Wells Fargo Investment	7
The Boston Co.	6
Newbold's Asset Mgmt.	6
Dana Investment	6

* As reported in *Pensions & Investment Age.*

Most new assets* 3rd quarter 1986

Firm	$ mils.
Wells Fargo Investment	2,560
Mellon Bank	1,100
The Boston Co.	615
Fischer, Francis, Trees	600
Lehman Mgmt. Co.	543
Pacific Investment Mgmt.	524
T. Rowe Price	518
Putnam Advisory Co.	500
Rosenberg Capital Mgmt.	415
Miller, Anderson & Sherrerd	400

Passive strategies get most business

By Trudy Ring

Large public pension funds' money moves, especially allocations to passive investment strategies, accounted for the biggest shifts of dollars reported in *Pensions & Investment Age* in the third quarter.

Aided by these moves, Wells Fargo Investment Advisors, San Francisco, was the hottest money manager of the quarter, with $2.56 billion in new business reported in *P&I Age*. Each quarter's hot — and cold — managers are determined solely by accounts reported in the publication.

Wells Fargo's new business included $1 billion for various index funds and dynamic hedging for the $2.3 billion Illinois State Universities' Retirement System, Champaign, and $1 billion in U.S. government bonds for the $6.4 billion New York City Teachers' Retirement System.

The Illinois universities' system's move doubled its allocation to passive investments. The New York teachers' fund's action was part of a bond portfolio restructuring.

Wells Fargo's total also includes a bond index fund of $300 million to $500 million for the $2.7 billion Public Employees' Retirement System of Mississippi. The $300 million figure was used in calculating the total. The Mississippi fund is increasing its passive investments to 50% from 20% of its assets.

Wells Fargo also was the quarter's hottest manager, other than limited partnerships, in number of new accounts. It drew seven new clients.

Mellon Bank, Pittsburgh, was second hottest with $1.1 billion in new business, including a $1 billion chunk of the New York teachers' bond portfolio and a $100 million in-state stock index fund for the $6.8 billion Pennsylvania State Employees' Retirement System.

The Boston Co., Boston, was third with $615 million in new assets under management, including a $500 million balanced account for the Los Angeles Water & Power Employees' Retirement Plan. That was one of six new accounts for Boston Co., making it second to Wells Fargo by that measure.

Fischer, Francis, Trees & Watts was next with $600 million, all for the New York City teachers' bond portfolio. Rounding out the top 10 were managers with all or part of their new assets under management coming from that move.

They were Lehman Management Co., New York, with $542.75 million in total new assets; T. Rowe Price Associates Inc., Baltimore, with $518 million; Pacific Investment Management Co., Newport Beach, Calif., $523.75 million; Putnam Advisory Co., Boston, $500 million; Rosenberg Capital Management, San Francisco, $415 million; and Miller, Anderson & Sherrerd, Bala Cynwyd, Pa., $400 million.

The teachers' fund announced the manager hirings in July as

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Advance contributions?

Pension executives evaluating possible tax benefits

By Marlene Givant

Pension fund executives, tax attorneys and actuaries are hitting the "books" to see whether their corporations might be able to make advance pension contributions and save on taxes.

Chrysler Corp., Detroit, saved itself $26 million by contributing about $200 million to its underfunded pension plan, before the Sept. 15, 1987, deadline, thus taking the deduction on the current, higher pre-tax reform rate. (*Pensions & Investment Age*, Sept. 29).

But though potentially lucrative, such a move is not hastily made.

Officials at Ford Motor Co., Dearborn, Mich.; Associated Milk Producers, San Antonio, Texas; and Scott Paper Co., Philadelphia, have just begun evaluating whether it would be feasible.

Ford executives haven't yet decided whether to make an advance contribution, according to Tom Foote, assistant manager-corporate news.

Associated Milk Producers officials will decide in November whether to make an early pension contribution, said Charlie Warren, assistant comptroller, while Scott Paper executives will decide by late December.

The Upjohn Co., Kalamazoo, Mich., won't be making an advance payment because it's fully funded, according to Jake Miller, trust investment manager.

"We didn't have a contribution for '86 and probably won't for a number of years," said Mr. Miller

International Minerals and Chemical Corp., Northbrook, Ill., would not benefit from paying early, said John Sonderegger, vice president-controller for salaried and hourly pension funds. "Any decision on pension contributions won't be based on taxes . . . We've had more losses than income recently.

"Expenses are higher than income. We have no incentive to accelerate pension payments."

Pension executives are studying the pros and cons of making their contributions early, partly at the behest of their consultants, actuaries and attorneys.

"We are recommending that every client look at that question," said Robert D. Paul, vice chairman of Martin E. Segal Co., New York.

"It's not a linear issue. You have to look at the whole balance sheet to see if it makes sense or not," said John Denney, vice president of James Meketa Associates, Newton Centre, Mass.

Corporations whose tax rates are likely to fall and companies with underfunded hourly pension plans would most likely benefit from contributing early, according to consultants.

Gary A. Pines, a benefits consultant in the Chicago office of Towers, Perrin, Forster & Crosby, outlined three factors involved in a corporation's decision whether to make an advance pension contribution:

- Because there must be a payment to be made, fully-funded plans could not benefit from the move.
- If a plan is underfunded, now would be a good time to make a contribution. While bringing the plan to a point at which it could cover a certain level of accrued benefits, the company also could save tax dollars.
- The company would have to have dispensable cash to channel into an advance contribution.

But a corporation might borrow money to make the contribution if the tax savings would exceed the liability, according to Mr. Paul.

Under tax reform, corporations will pay tax at 34% for taxable years beginning on or after July 1, 1987. Now, corporations pay 46% on income exceeding $100,000.

Overall, a company would base a decision to pay early on the move's present value.

"If you're going to be in a 34% tax bracket, you need to make a decision — and it's a present value

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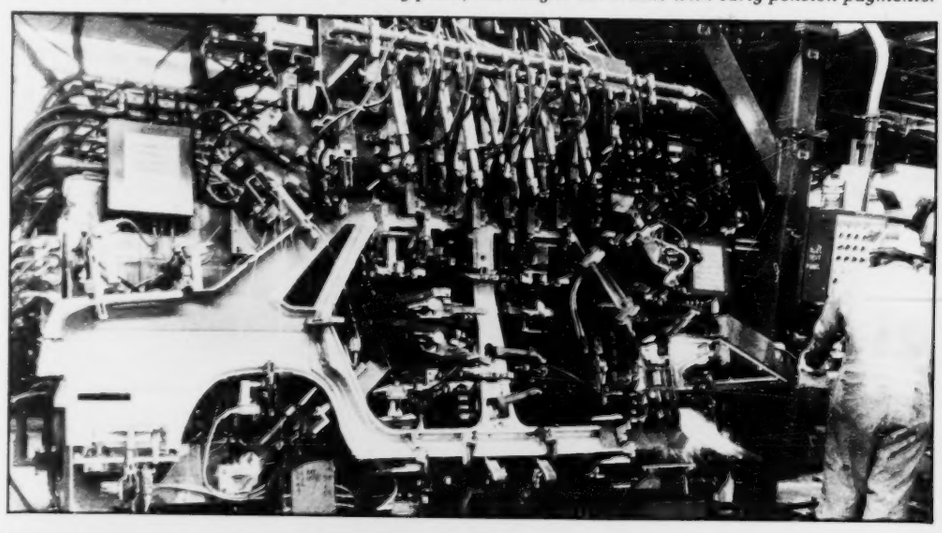
Chrysler Corp., which operates this assembly plant, has sought tax breaks with early pension payments.



Auto Club 'insures' $40 million portfolio

By Steve Hemmerick

LOS ANGELES — The Automobile Club of Southern California, an insurance company, is protecting an additional $40 million invested in stocks with portfolio insurance.

The $40 million, in an index fund managed by Northern Trust Co., Chicago, is corporate, not pension money, that company officials want to protect against sudden downswings in the market. G. Leslie Britto, investment coordinator with the Automobile Club, said she and others at her company have been monitoring closely some $65 million invested in equities that her company first protected with dynamic hedging in 1981.

Portfolio insurance or dynamic hedging is designed to assure investors a minimum rate of return and allow most upside market gains, minus the cost of the protection.

Hedging is being provided by Leland O'Brien Rubinstein Associates Inc., Los Angeles, for a portion of the Automobile Club's reserves and surpluses in its insurance account, said Ms. Britto.

The reserve for an insurance account is an amount representing actual or potential liabilities kept by insurer to cover obligations to policyholders and third-party claimants. That is money set aside to pay claims, which it can't afford to lose because if reserves can't meet claims, an insurance company might have to use its operating capital.

"Our sensitivity to risk is explained by the fact that we are property casualty insurers," said Ms. Britto.

A surplus is money the company holds over and above the money needed for policy reserves on policies already written.

The decision to invest in an index fund that tracks the Standard & Poor's 500 stock index was not a move away from use of active management, said Ms. Britto.

Instead, she said, it was a way to

Continued on page 79

Market instability seen

Cash raised in third quarter

By Fred Williams

Active equity managers raised cash slightly during the third quarter in anticipation of continued market instability for the remainder of this year, but expect a rebound sometime in 1987.

Although third quarter cash reserves increased slightly to 6.5% from 6.3% at the end of the first half of the year, managers followed by *Pensions & Investment Age* were divided into those who raised cash and those who committed additional cash to the equity market during the quarter.

The latest analysis from INDATA indicates money managers had increased equity cash to about 6.8% just before the almost 121-point drop in the Dow Jones industrial averages Sept. 11 and 12, then committed some cash reserves to the weaker market by the end of the quarter. INDATA, an investment analysis service, is owned by Gordon, Haskett & Co., Southport, Conn. Its survey represents more than 2,000 institutional equity portfolios valued at more than $200 billion.

The steep drop in the Dow caught money managers off guard, although some started getting more cautious as the financial markets took on a more volatile complexion at mid-year.

Sit Investment Associates Inc., Minneapolis, raised equity cash to 12% in the third quarter from 10% at the end of the first half.

The decision to increase cash "has been proven out in the market," said Peter Mitchelson, executive vice president at Sit. "It's time to be more cautious, but we are still long-term bulls."

Referring to the Dow's plunge, Mr. Mitchelson said, "We didn't anticipate it and we did nothing in preparation for it. If anything, a decline of that nature will create some values. There hasn't been any strategy shift even though we had been raising a little cash. The basic thing is that you are coming off a good four years and it's normal to expect some pause.

"It has been a marvelous four

Continued on page 80

Opinion

Talk about taxes hasn't ended

PRESIDENT REAGAN has yet to sign the tax reform act passed by Congress, and already some in Congress are talking of raising taxes.

It is difficult to believe that Congress can find no other way to cut the deficit than by raising taxes. It is difficult to believe that federal spending must take almost 24% of the gross national product when for most of the 1950s, '60s and '70s, the government was able to operate on less than 20% of a much smaller GNP. It is difficult to believe that the only place Congress can find to cut the budget is in defense, which now absorbs a smaller percentage of the GNP than it did through most of the 1950s, '60s and '70s.

Clearly, the problem is that members of Congress find it impossible to say no to anyone who might be able to swing a vote for or against them.

But they should remember the money they are giving away is not waved into existence by a magic wand, but comes from the hard-earned income of taxpayers.

They should be as slow to spend taxpayers' money as they are to spend their own.

Unfortunately, the way Congress throws money at programs and problems, the way it passes pork-barrel legislation, it is clear that most members have lost sight of how hard the average taxpayer works to earn his or her income.

Defined benefit plans slowly dying

CONGRESS HAS HAMMERED another nail into the coffin of defined benefit pension plans.

The new nail was hammered in by the tax reform bill just passed. Under the law, some companies with defined benefit pension plans will have to pay taxes on part of their pension contributions.

This is because companies may report different pension expense figures to the Internal Revenue Service than they will report to shareholders under the Financial Accounting Standards Board Statement 87.

FASB 87 requires companies to use a more liberal actuarial method than is actually used by many companies, which tend to fund conservatively.

Thus, the companies will report a lower pension expense, and, hence, higher earnings, to shareholders than to the IRS.

As a result, companies that find themselves exposed to the alternative minimum tax provisions in the law will have to pay 10% of the difference between the two measures of pension expense.

They can avoid this problem by abandoning defined benefit plans with their actuarial complications and adopting defined contribution plans, which are simpler to administer and report on to the employees, the shareholders, the IRS and the Labor Department.

The latest nail comes on top of five-year vesting (also in the tax bill) and FASB 87 (which required that pension liabilities be shown on the balance sheet).

The first nail in the coffin was the passage of the Employee Retirement Income Security Act, with its vesting, funding, fiduciary liability and reporting requirements, which added

significantly to the costs and complications of defined benefit plans. Corporations swallowed these.

Then the Economic Responsibility and Tax Act of 1982 reduced the value of defined benefit pensions for top management.

Now tax reform has, again, increased the cost and complications of defined benefit plans.

At some point, the final nail will be driven into the coffin, and companies will abandon defined benefit plans for most employees. That point may well be near.

Letters to the editor

Asset listing wrong

To the Editor: In your ranking of international investment managers published Aug. 4, Baillie Gifford Overseas Ltd. is shown as having $2 million under management for ERISA clients.

This should have read $55 million as of Dec. 31, 1985.

We currently manage $143 million for two such clients.

Peter J. Murray
Marketing executive
Baillie Gifford Overseas Ltd.
Edinburgh, Scotland

CIGNA data

To the Editor: Since we missed your annual issue of international advisers, we would appreciate it if you would place this information in "Letters to the Editor:"

CIGNA is at 950 Cottage Grove Road, Hartford, Conn. (203) 726-3153.

Total assets managed are $39 billion; tax-exempt assets, $18 billion; and tax-exempt assets invested overseas, $61 million.

A subsidiary of CIGNA Corp., CIGNA International Investment Advisers Ltd., managed $61 million in international accounts for 220 U.S. tax-exempt clients as of March 31.

Of that, $51 million was in foreign stocks, $1 million in bonds and $9 million was in cash equivalents.

The equity assets were committed most heavily to Japan, 47%; France, 7%; Germany, 6%; Netherlands, 6%; and Switzerland, 5%.

All of the investments were in commingled accounts.

CIGNA uses active geographic asset allocation and identification of fundamental changes in economic growth in its top-down approach.

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Thomas R. John, vice president-investment sales, CIGNA Asset Advisers Inc., is client contact.

Carolyn F. DeLisle
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Hartford, Conn.

Citicorp Investment

To the Editor: Citicorp Investment Management was omitted from the Cash Management Directory manager listing published July 21.

In addition to Citibank's extensive cash management services, Citicorp Investment Management Inc., a wholly owned subsidiary of Citicorp, is a leading manager of direct corporate assets.

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Our contact is Joan McIlroy, vice president, 153 E. 53rd St., New York, N.Y. 10043; (212) 559-9710.

Michelle B. Alifanz
Vice president
Citicorp Investment
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New York

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Public funds

Numbers improve as constraints are eased

By Chuck Paustian

Public pension funds, whose investment performance has been hindered in the past by restrictive investment guidelines, are beginning to find ways around those constraints.

• The $900 million Cook County Annuity & Benefit Funds, Chicago, which requires all final investment decisions to be approved at a monthly meeting of the board of trustees, allows its advisers to call an emergency meeting if a situation dictates, said John E. Fitzgerald, director.

• The $900 million District of Columbia Retirement Board, Washington, which operates under a restrictive South Africa divestiture policy, has opened up its portfolio to a wider variety of asset classes, said Earl Johnson Jr., executive director.

The 1986 Public Pension Funds report, conducted by Greenwich Associates, Greenwich, Conn., showed 72% of the public funds surveyed made non-legislative changes in investment policy during 1985, down slightly from the 74% in 1984 but up significantly from the 46% in 1983.

Public fund executives are looking to circumvent restrictions to which they, and their investment managers, attribute poor performance or potential loss.

Other restrictions mentioned by executives and managers that could hurt performance include maintaining a specified portion of the assets in cash, investing only in securities mentioned on a previously designated list and directing all trades through appointed brokerage houses.

Douglas A. Steger, vice president-marketing at Capital Supervisors Inc., Chicago, said his firm has started keeping two sets of performance numbers for its public and non-public clients to show the disparity in the figures.

"It's pretty legitimate when you get the chance to explain to them why we have two sets of numbers," said Mr. Steger.

He said public fund accounts have underperformed non-public ones (including corporations) by as much as 20% over a five-year period because of the various restrictions placed on the public accounts.

"Ten years ago, it was a real problem," said Ray Lillywhite, senior vice president in the San Francisco office of Alliance Capital Management Corp.

"As they were getting into active management and equity management, there was a great reluctance (on the part of the trustees) to give full discretion and remove the legal list," he said.

(The legal list was a list of approved securities in which the public pension fund could invest.)

Some public funds, such as the $500 million Vermont State Retirement System, Montpelier, were early pioneers in minimizing the potential impact of investment restrictions.

The Vermont Constitution requires the state treasurer to approve the pension system's investment transactions. Emory Hebard, state treasurer, said the approval process has become a mere technicality.

He said approval is granted the managers automatically, usually after the transactions have occurred, adding this has been the process for the 10 years he has been treasurer.

"If your managers are any good, you want them to manage and not hobble them in any way," said Mr. Hebard. "The way we do it is we hire good managers and let them loose."

Realizing the potential damage the restrictions could do to the fund, other public pension executives have begun to implement programs for their managers to avoid any negative situations.

"We have been extremely pleased with the progress made to overcome those restrictions," said Mr. Lillywhite, who previously worked for three public pension funds.

Mr. Fitzgerald said the ability of a manager to call an emergency meeting of the trustees was granted within six months after the fund initially moved to external equity managers about two years ago.

"I think any time the money managers have found it necessary, they've been able to get the board to respond immediately to their concerns and act promptly," Mr. Fitzgerald said.

He said a majority of the five-member board of trustees usually can be assembled the same day the investment adviser makes the request for an emergency meeting.

The process was implemented because the board of trustees understood the requirement that they make all final investment decisions could lead to problems. The board meets once each month.

"Basically, we didn't want to avoid opportunities and suffer any losses because of the inability to act," said Mr. Fitzgerald. He also said the board has no intention of relinquishing final approval.

"If they can't work within that and stand up to be graded in that respect, they should not be working with us," he said.

Mr. Johnson said the trustees of the District of Columbia's retirement system also realized the possible consequences of their anti-apartheid stance.

"One of the reasons our asset allocation is so diversified is to diversify away the risk of the restricted list of stocks," he said.

The retirement system's South Africa policy, adopted in 1984, states a manager can't invest in any company or financial institution that does business in, or has loans outstanding to, South Africa. A manager also can't deposit funds in such a financial institution.

"We probably have the most restrictive policy regarding South Africa," said Mr. Johnson, adding the restricted list of stocks comprises about 300 companies.

He attributed the diversification plan to the fund's above-average performance since adopting the restricted list.

"Up to this point, our performance, as

Continued on page 20

Plans find ways to bolster funding

By Brian Lehrer

Once saddled by poor funding, many state pension plans have taken advantage of a stronger securities market, fewer benefit improvements and increased government leeway to buoy their assets.

Studies comparing the funded ratios of 38 states from 1985 and 1986, conducted by the Martin E. Segal Co., Washington, show funded ratios improved in 21 states, declined in 15 and remained the same in two.

The funded ratios are derived by dividing the amount of total assets by the amount of total accrued liabilities. Diminishing unfunded liabilities have helped states increase their ratios.

Comparison of the interest-rate and salary assumptions of 40 states from the '85 and '86 studies shows 12 states increased the interest rates, one state decreased the interest rate and 27 remained the same. Some 23 states increased salary assumptions, four states decreased them and 13 remained constant.

A higher interest-rate assumption will lower unfunded liabilities; a higher salary assumption will increase them.

"I would say our latest decline in unfunded liability is because of the strength of the securities market," said Thomas Bleakney of Milliman and Robertson, Seattle, consulting actuary for the $1.1 billion Idaho Public Employee Retirement System, Boise.

"This year our numbers are going to be looking darn good because of high investment returns," he said.

Idaho's unfunded liabilities totaled $615 million in 1985, but decreased to $556 million in 1986, Mr. Bleakney said.

Norman Turnipseed, chief accountant and fiscal officer for the $5 billion Retirement Systems of Alabama, Montgomery, attributes Alabama's meteoric funded ratio increase, to 91.25% from 68%, to prudent investments and fewer benefit improvements.

"We have not had a substantial benefit improvement since 1976," he said.

He said adding benefits caused the state's unfunded liabilities to mushroom between 1963 and 1976. In that period, the teacher's pension fund alone more than tripled its liabilities, Mr. Turnipseed said.

But over the past 10 years, Alabama has turned the tables on liabilities, which plummeted by $298 million between 1984 and 1985.

Looser government reins have allowed public pension funds the freedom to set interest assumption rates and to invest in higher-yielding ventures, said Thomas Levy, senior vice president and actuary with Martin E. Segal.

"It used to be typical for the interest rate assumption to be established by state law," Mr. Levy said. "Now that's very rare."

Today's common rates, between 7% and 8%, are "significantly higher" than the typical 5% rates of five or 10 years ago, he said.

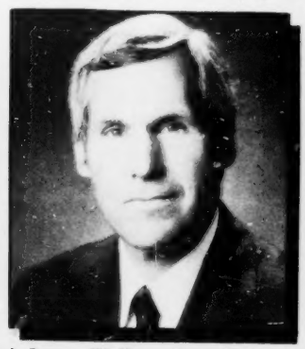
"A higher interest rate will sometimes result in a lower unfunded liability," Mr. Levy said.

Alabama adopted an 8% interest assumption in 1985, up from its 1984 assumption of 7%, because of better equity yields, Mr. Turnipseed said.

A higher assumption rate raises the discount rate, which in turn lowers a fund's liabilities.

Pension funds have increased

Continued on page 16



Chief Investment Officers Greta Marshall, California Public Employees'; Laura Wallace, Nevada Public Employees'; and DeWitt Bowman, San Francisco City and County Employees'.

Funds like new combination

Public execs link incentive fees with venture capital

By Trudy Ring

Public pension fund executives increasingly are expressing interest in the use of performance-based compensation arrangements for venture capital managers.

Many public funds, under no legal restrictions on performance-based fees, have adopted such arrangements for traditional investment managers and see extending the practice to alternative investments as a natural progression.

Many venture capitalists, however, oppose performance-based fees, saying the present system not only works well, but also already compensates the managers for performance.

Typically, pension funds and other investors that become limited partners in a venture capital fund pay the general partners — managers of the fund — a management fee, with the average being 2% to 2.5% of assets committed. Also, the limited and general partners usually split the capital gains of the venture fund. Commonly, the limited partners receive 80% of the gains and the general partners, 20%.

But Greta Marshall, chief investment officer of the $37 billion California Public Employees' Retirement System, Sacramento, said the 80-20 split isn't a true performance-based arrangement.

"They (general partners) get that split regardless of how they do in comparison to any relevant benchmark," she said. A real performance-based fee structure might give the general partners a very small percentage of the gains if profits are low, and increase the percentage if profitability is greater.

She noted there now is no accepted benchmark for venture capital performance, but some consulting firms are developing these measures. Venture capitalists contend such measures will be hard to develop.

The California employees' system has no venture capital investments now, but will look at this asset class as part of its asset allocation review, probably within the next month, Ms. Marshall said. The system likely would allocate 1% or 2%, and definitely no more than 5%, of its assets to venture capital, she said.

The system has one equity manager on a performance-based fee now and is negotiating such agreements with four or five more, she said. It also is looking at performance-based fees for real estate.

"It's kind of a natural for us wanting (performance-based fees) to flow through to other areas," she said.

Kenneth Mertz, chief investment officer of the $6.8 billion Pennsylvania State Employees' Retirement System, agreed. "We have put in performance-based fees for equity and bond managers; and we are feeling that we would like to compensate the venture capital managers on that same basis," he said. "We don't see a difference between the different asset classes."

The fund has invested in several venture capital partnerships, but has not negotiated performance-based fees with any to date, Mr.

Continued on page 18

Arizona set to diversify into international equity

PHOENIX — The $5.6 billion Arizona State Retirement System will diversify its asset mix during the next 12 months to include its first investments in the international equity markets, according to Max Sullivan, director.

The decision to move into international follows a detailed asset allocation study that Callan Associates, San Francisco.

Until this year, Mr. Sullivan said, the system was prohibited by state statute from investing in international. The Callan study began after a change in the law became effective in January.

Mr. Sullivan said the target asset mix range for the fund is 48% stocks, 15% bonds, 5% real estate equity, 10% mortgages, 10% zero-coupon bonds, 5% international stocks and 7% cash. All include flexibility to change based on existing and anticipated market conditions, he said.

The current asset mix is 43% stocks, 43% bonds, 6% mortgages and the balance in cash and short-term instruments.

Funding for the international equity manager, expected to be hired before July 1, will be from cash flow, said Mr. Sullivan.

The Arizona system also is looking to bring on another balanced manager by July 1, after dropping Gardner and Preston Moss, which managed $500 million, earlier this year (*Pensions & Investment Age*, March 17). The money was placed in an existing index fund run by Wells Fargo Investment Advisors, San Francisco. ■

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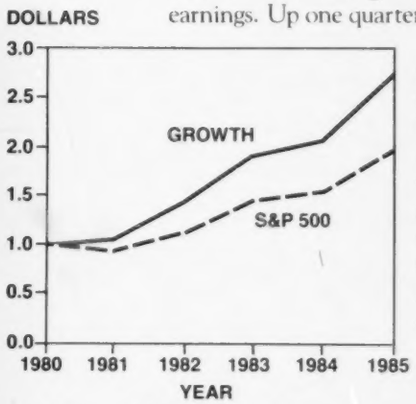

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Plans find ways to . . .

Continued from page 15

equity investments as legislatures have gradually made the legal barriers to high-risk ventures more elastic.

According to *P&I Age*'s 1986 annual pension profiles, public funds increased stock investments by 3% in 1985.

"State laws used to restrict what the assets of a pension plan could be invested in," Mr. Levy said.

"These laws exist, but they are far fewer and less restrictive."

For example, in June 1984, California approved the "prudent man rule," a law permitting public pension funds to invest under guidelines similar to private funds (*P&I Age*, June 25, 1984).

Changes in investment laws nationwide, including in New York, Minnesota, Florida and Utah, precipitated a 10.7% increase in security holdings between July 1978 and June 1984. (*P&I Age*, Oct. 28, 1985).

The new laws have pushed public pension investment strategies closer to ones followed by private plans.

"Public funds certainly don't take as many risks," Mr. Levy said, "but the difference is becoming smaller."

Mr. Levy also cited the increased attention bond rating agencies are giving to pension assets as another impetus for states to earmark money to plans.

A better-funded plan means higher bond ratings and lower interest rates, he said.

Don Hoffmeister, executive director of the $2.4 billion Illinois State Universities' Retirement System, Champaign, said he expects bond ratings to affect the plan's future funding.

"More and more now, bonding agencies are looking at the obligations of the public pension fund," he said.

"I think the bond rating will eventually impact how we are going to be funded."

Despite the trend toward improved funding, a new obstacle has emerged over the past two years — South Africa divestiture, Mr. Levy said.

New Jersey's seven pension funds, totaling $16.7 billion, experienced a net fiscal loss of $56 million in assets last year because of such policies prohibiting investment in companies that do business in South Africa, said Roland Machold, director of divisions of investment.

"This figure represents the losses realized on the sales of the direct holdings of the pension fund," he said.

"Whether or not our funding will improve next year depends on the markets," Mr. Machold said.

Mr. Levy cautioned the study's results and figures are not gospel.

"The 1986 survey is the first reliable one we've done in this area," he said.

Last year's survey was compiled from a report by the National Association of State Retirement Administrators. This year's study was based on copies of each state's actuarial reports.

According to Phil Romello, actuarial associate with Martin Segal, the NASRA study was conceived for "an entirely different purpose," rendering comparisons between Martin Segal's '85 and '86 studies unreliable.

Funding of state employee pension funds*

State	Funded ratio	Interest rate	Salary rate	As of
Alabama	91.25	8 %	5.55 -8.16%	9/30/84
Alaska	86.25	8	8 - 7%[2]	6/30/85
Arizona	92.4	8	6½	6/30/85
Arkansas	125.2	7	5 - 8.8	6/30/85
California	63.1	8½	8	6/30/85
Colorado	60	7	5.5 - 12.9	12/31/84
Delaware	68.88	7½	6 - 9.89	12/31/84
Florida	52.85	9	7½	7/1/85
Georgia	50.44	7	5.2 - 9	6/30/84
Hawaii	82.31	8	6½	6/30/85
Idaho	59.21	7½	6	6/30/85
Illinois	59.52	8	6½	6/30/85
Indiana	70.77	7½	6½	6/30/84
Kansas	92.88	7	6	6/30/85
Kentucky	84.6	7	6	6/30/85
Maine	36.75	8½	5½	6/30/84
Maryland	42.3	7	6.15 - 9.98	6/30/85
Massachusetts	31.24	7½	6	7/1/83
Michigan	79.32	8½	6½	9/30/85
Minnesota	76.23	8 - 5[1]	6½	6/30/85
Mississippi	67.94	7½	5.18 - 9.22	6/30/84
Missouri	NA	7	5 - 8	6/30/85
Nebraska	NA	5		12/31/84
Nevada	57.08	8	6½	6/30/84
New Hampshire	96.85	8	6 - 8.60	6/30/83
New Jersey	43.36	6½	2.86 - 6	3/31/85
New Mexico	54.91	8	6 -9.8	6/30/85
New York	NA	7½	8½	3/31/85
North Carolina	79.76	7½	6.2 - 12.65	12/31/84
North Dakota	96	7½	6	7/1/85
Ohio	42.64	7½	5.5	12/31/84
Pennsylvania	58.22	5½	2.5 - 5.33	12/31/84
Rhode Island	52.79	7½	4.17 - 5.85	6/30/85
South Carolina	94.45	7	5.30 - 11.31	6/30/85
South Dakota	75.42	7	5 - 10.9	6/30/84
Tennessee	85.81	8½	8	6/30/85
Texas	NA	9	8.5	8/31/85
Utah	NA	7½	5.75	1/1/85
Vermont	56.36	8	5.17 - 6.87	6/30/85
Virginia	52.66	6½	4.5 - 8.6	6/30/84
Washington	50.45	7	5.25 - 11.15	12/31/84
West Virginia	48.68	7	6.01	6/30/84
Wisconsin	86.27	7½	6 - 10.9	12/31/84
Wyoming	68.14	7½	6	1/1/85

[1] 8% preretirement, 5% post.
[2] 8% for 5 years, then 7%.
* The following state employee retirement systems did not respond to the request for actuarial reports: Connecticut, Iowa, Louisiana, Montana, Oklahoma, and Oregon.
Source: Martin E. Segal Co., July 1986, from actuarial reports provided to Delaware State Pension System.

Corporate Finance

Proprietary product sets best banks apart

By Marci Baker

GREENWICH, Conn. — Proprietary product is the most crucial element separating the winners from the losers in an increasingly fast-paced, competitive international investment banking business, a survey shows.

According to the 10th annual report on investment banking by Greenwich Associates, the ability to design, develop and deliver this type of product is what enables a handful of exceptional investment banking firms to create big profits while executing transactions on an unprecedented scale and to securitize previously illiquid assets.

That ability also enables them to inform companies that they are being put into play, to arbitrage markets vs. futures and to come up with innovative new products in more complex financial markets.

Among the results underscoring the assessment, corporate executives said they look to an investment banker's understanding of the company and the industry, credibility with the company's senior management and strength in creative and innovative ideas in determining an investment house's effectiveness in giving a presentation.

The survey, based on personal interviews with 1,490 senior financial executives of large corporations between May and July, showed the largest amount of executives (60%), pointed to understanding of company and industry as most effective, followed by credibility (48%), and creative ideas (41%). Perhaps not surprisingly, those bankers considered least effective in presentations were those seen as lacking those three key ingredients, according to the survey.

These factors rated at least two to three times higher than others, such as outstanding relationship manager (22%), responsiveness to requests for information (20%), and market judgment and timing (19%). The latter two are much more important to utilities, 43% of whose executives said market judgment and timing are important in their assessment.

For public bond offerings as well as Eurobonds, executives said they rely most on understanding of company needs and market judgment and timing. Some 36% and 35%, respectively, said understanding the needs of the company and market judgment are the most important criteria, followed by credibility of company's senior management (32%), distribution capability (29%) and creative and innovative ideas (27%). Credibility of senior management was especially valuable to bank holding company executives (52%), while thrift executives (39%) put high value on the expertise of product specialists.

In Eurobond offerings, 30% and 26% of company executives rated understanding company needs and market judgment and timing, respectively, highly.

Expertise of relationship managers in international finance (21%), distribution capability (21%) and credibility with company's senior management (19%) followed.

Creative and innovative ideas, rated sixth with 17% in the universe of total companies, and second — with 31% — among large industrials. Large industrials ranked market judgment and timing first — with 44%.

Only financial executives with large industrial firms consider willingness to commit capital and

Continued on page 26

Chrysler Corp. at a glance

	1985	1984	1983	1982	1981	1980
Long-term debt as a % of capitalization	36	18.7	49.1	117.8	135.2	104.3
Interest coverage by earnings*	15.6	14.7	3.3	1.4	.09	−3.5

* Represents earnings before interest and taxes plus depreciation divided by interest.
Source: Chrysler's 1985 report to shareholders.

Chrysler rating upgraded

Reduced borrowing costs in corporation's future

By Brad Rudin

DETROIT, Mich. — Encouraged by Fitch Investors Service Inc.'s upgrade of Chrysler Corp.'s credit rating and the prospect of an upgrade by Moody's Investors Service, Chrysler financial executives and investment bankers predict reduced borrowing costs for the corporation that six years ago stood at the brink of bankruptcy.

Fitch's designation of Chrysler as an A rated company stands alone among the four rating agencies that make their evaluations public.

"The Fitch upgrade certainly won't hurt; it certainly will help some," said Frederick W. Zuckerman, Chrysler's treasurer. "I think probably we need one more agency to come along to make a big dent in that 100-basis point spread."

A spread of about 100 basis points separates BBB intermediate-term issues from A debt, he said, with 100 basis points equaling one percentage point.

The improved rating from Fitch in September, combined with an upgrade from Moody's, would do more than improve Chrysler's position in the public debt market, Mr. Zuckerman said. "It probably has some kind of psychological benefit and should, all things being equal, help with our stock price."

The commitment fee for Chrysler's revolving credit arrangement also could be renegotiated and bank lending rates could fall, both on the strength of the company's improved credit evaluation, Mr. Zuckerman said.

The improved ratings, he said, would be most beneficial to Chrysler Financial Corp., Troy, Mich., a heavy issuer of debt in the capital markets. Chrysler Corp., the parent company, has no plans to issue debt, Mr. Zuckerman said.

If Chrysler Financial receives a widely based single A rating, the subsidiary could expect an annual reduction of borrowing costs of between $25 million and $30 million, he said, based on a 100-basis-point reduction on the cost of issuing $3 billion of debt. Mr. Zuckerman noted the size of the reduction depends, in part, on how the other rating agencies proceed after Moody's completes its review.

An A rating by Fitch and Moody's might encourage Standard & Poor's Corp. to re-evaluate its position on Chrysler, Mr. Zuckerman added.

One investment banker, who did not want to be identified, said an upgrade by Moody's would result in a reduction in the cost of debt of between five and 10 basis points.

At Merrill Lynch Capital Markets, Andrew J. Cooley, managing director, said an A rating from Moody's could trim the spread between 10 and 20 basis points. "It's a little tough to tell at this point because we're all waiting to see what the rating will be," he said. Merrill Lynch is one of Chrysler's investment bankers.

Some of the tightening in spreads between Chrysler debt and Treasury issues was seen in August, when Chrysler Financial sold a three-year, $200 million issue bearing a coupon of 7.25%, Mr. Cooley said.

The Fitch upgrade and an upgrade by Moody's within the B range would leave Chrysler with a spread trimmed between five and 15 basis points, he said.

Continued on page 26

New domestic issues top $200 billion for 9 months

By Marci Baker

NEW YORK — A slower, but still brisk level of underwriting activity in the third quarter pushed overall domestic new issues volume over the $200 billion mark for the first nine months of 1986.

While the gap between the market shares of the top underwriters appeared to be narrowing, Salomon Brothers Inc. continued to lead other firms domestically for both the three- and nine-month periods.

Issuers raised $58.5 billion in the U.S. marketplace in the third quarter, according to data provided by IDD Information Services, New York. That represents a 23% drop from the record $76 billion raised in the second quarter and a 14% decline from the almost $68 billion generated in the first quarter.

Uncertain stock and bond markets kept some issuers out of the primary capital markets. Even so, low interest rates kept corporate appetites for cheap financing strong enough to push domestic new issues volume for the nine-month period to an unprecedented $202 billion — more than double the $94.7 billion raised in the United States by the same time last year.

U.S. issuers raised another $31.4 billion overseas during the nine months, putting the tally for worldwide financing activity by U.S. issuers at $232.2 billion, reported IDD. Including non-U.S. issuers, worldwide underwriting volume climbed to $359.4 billion by the end of September.

Last year, U.S. issuers generated $116.3 billion in worldwide offerings during the nine months through September. Including foreign entities, worldwide volume for this 1985 period was $203 billion.

Salomon captured 18.4% of the nine-month domestic underwriting volume, as lead manager for $37.2 billion of the total in 331 deals. First Boston Corp. followed with a 13.5% market share, underwriting $27.2 billion in 301 offerings.

Drexel Burnham Lambert Inc. rated third for the nine-month period with 12.3% of domestic volume; Morgan Stanley & Co. fourth, with 11.9%; and Goldman, Sachs & Co., fifth, with 10.6%.

For the third quarter, Salomon lead managed 14.5% of volume generated, underwriting $8.5 billion in 86 deals; Morgan Stanley, 14% market share, underwriting $8.2 billion in 66 deals; First Boston, 13.9% and $8.16 billion in 66 deals.

On a worldwide scale, Salomon took top honors for offerings by U.S. issuers only, while Credit Suisse First Boston ranked first when non-U.S. issuers' financing activities were included in the numbers for the first nine months of the year.

In the former, Salomon managed almost $40 billion for a 17% share of the market, followed by

Underwritten offerings - U.S. market*
(Jan. 1 — Sept. 30)

Firm	$ mils.	Issues
1. Salomon Brothers	37,220.3	331
2. First Boston	28,237.4	301
3. Drexel Burnham Lambert	24,798.9	209
4. Morgan Stanley	23,959.9	202
5. Goldman, Sachs	21,412.2	201
6. Merrill Lynch Capital Markets	19,386.8	219
7. Shearson Lehman Brothers	11,504.0	187
8. Kidder, Peabody	6,739.3	131
9. PaineWebber	3,361.3	93
10. Prudential-Bache Securities	3,089.2	56

* Full credit given to lead managers

Underwritten offerings - worldwide*
(Jan. 1 — Sept. 30)

Firm	$ mils.	Issues
1. First Boston	45,376.5	260
2. Salomon Brothers	44,293.8	299
3. Morgan Stanley	29,564.7	217
4. Drexel Burnham Lambert	25,171.9	204
5. Merrill Lynch Capital Markets	24,493.0	227
6. Goldman, Sachs	23,699.8	198
7. Shearson Lehman Brothers	13,774.9	146
8. Nomura Securities	13,595.7	118
9. Deutsche Bank	9,815.8	67
10. Morgan Guaranty	8,243.5	54

* Full credit given to lead managers

New domestic issues . . .

Continued from page 25

Morgan Stanley, with $25.1 billion or 10.8%; and Drexel with $25 billion or 10.8%.

CSFB, meanwhile, managed $45.4 billion for 12.6% of the worldwide nine-month financing volume that includes foreign issuers. Placing second was Salomon, with $44.3 billion or 12.3%; Morgan Stanley, third, with almost $30 billion, or 8.3%; and Drexel, fourth, with $25.2 billion and 7%.

CSFB also maintained its leading position in the Eurobond rankings, capturing 14.3% or $4.5 billion of the $31.4 billion in financing generated by U.S. issuers overseas.

Nomura Securities, which rated sixth for the nine-month period in 1985, ranked second, managing $3.2 billion for a 10.2% market share. Salomon was third, with 9.5% of that market, while Merrill Lynch Capital Markets was fourth, with 8.8%.

Of the $202 billion total for domestic volume, $152 billion was raised in the U.S. non-convertible debt markets. Another $30.7 billion was raised domestically in the common stock market over the last nine months, $9 billion was raised through convertible debt offerings, $6.7 billion through straight preferred issues and $3.3 billion through convertible preferred issues.

Each of these represents an increase over last year, ranging from 30.3% for convertible debt to 137.4% for straight debt.

(For the third quarter, issuers raised $45.6 billion of straight debt, $2 billion of convertible, $7.4 billion in common stock issues, $1.7 billion in straight preferred deals, and $1.6 billion in convertible preferred deals.)

Among the top-ranked underwriters for these nine-month categories, Salomon led in the straight debt and common stock rankings. The firm managed $31.7 billion, or 20.9%, of the straight debt deals for the period and $3.7 billion, or 12.1%, of the common equity deals issued domestically.

On the debt side, Salomon was followed by First Boston, with $25.7 billion of the total, and Morgan Stanley, with almost $20 billion. Goldman rated second in the stock rankings, with $2.81 billion, while Merrill rated a close third, with $2.79 billion.

Drexel, meanwhile, leads in the convertible debt and two preferred stock market segments, according to IDD. And in an indication that the firm's efforts to build strength in other arenas besides junk bonds may be meeting with some success, Drexel also ranked first for initial public offerings.

Drexel was lead manager for $2.9 billion, or 31.6%, of the convertible debt issues making their way into the market during the first nine months of 1986. The firm managed $1.4 billion, or 21.1%, of straight preferred offerings and $1.3 billion, or 39.8%, in convertible preferred volume.

In IPOs, Drexel took the lead by underwriting 33 smaller issues for a total of $1.7 billion, or 12.4%, of that market.

First Boston ranked second in convertible debt deals, with $1.1 billion; Salomon was second in straight preferred deals, with $1.3 billion; Kidder, Peabody & Co. was third in convertible preferred, with $475 million; and Prudential-Bache Securities was second in IPOs, with $1.5 billion.

Goldman, Sachs, which held the No. 1 IPO underwriting slot a year ago, rated 11th for the first nine months of 1986.

Among other underwriting highlights:

- Drexel continues to dominate the high-yield bond market, acting as lead underwriter on 45.6%, or $10.9 billion, of the $23.9 billion raised through the nine-month period, according to IDD. Its junk bond volume accounted for about $10.8 million, or 43.5%, of the $24.8 billion in total underwriting volume credited to the firm. During the same period last year, Drexel underwrote $5 billion in junk bonds, representing 62.5% of the $8 billion in total financings it managed.
- While Drexel clearly continues to dominate the high-yield bond arena, Morgan Stanley appears to be coming on strong. In what may be a first, Morgan Stanley usurped Drexel's traditional No. 1 spot in junk bonds by underwriting $2 billion in nine junk bond deals during the quarter to capture 24.7% of market. Drexel managed $1.5 billion in 17 deals for 18.5% of the $8.1 billion raised during the three-month period.

Morgan's third-quarter activity is largely responsible for its second-place ranking for the nine-month period. It managed 11 deals totaling $2.4 billion for that period in junk bonds, winning a 10% market share, according to IDD.

- Salomon took top honors for mortgage-related offerings, underwriting $10.8 billion of the $35 billion raised over the nine-month period. First Boston followed, capturing $7.8 billion of the volume. Merrill ranked third, with $3.2 billion.

The nine-month volume represented a 164% increase over the $13.4 billion raised during the first nine months of 1985.

- Goldman, Sachs led underwriters on three of the 10 largest common stock deals of the year to date. It acted as lead manager for Sears, Roebuck & Co.'s $332 million September offering, CIGNA Corp.'s $310 million May offering and Motorola's $302.8 million February offering. Pru-Bache had two of the 10 largest deals — the $750 million First Australia Prime Income Fund and the $570 million Global Yield Fund.

Lazard Freres & Co. underwrote the largest stock deal of the year so far — the $1.2 billion Henley Group IPO.

- Drexel and First Boston each underwrote four of the year's 10 largest debt deals. Among Drexel's deals was BCI Holding's $2.35 billion financing — the year's largest — used to take Beatrice Cos. private. Three of First Boston's four deals were securities backed by auto loans and issued by General Motors Acceptance Corp. The deals ranged from $725 million to $1 billion.
- Home Shopping Network was the best-performing IPO during the nine-month period. Home Shopping went public in May, selling 2 million shares at just less than $6 a share. Sept. 30, the stock was selling at 42⅛, for a 602.2% gain. The deal was managed by Merrill. ■

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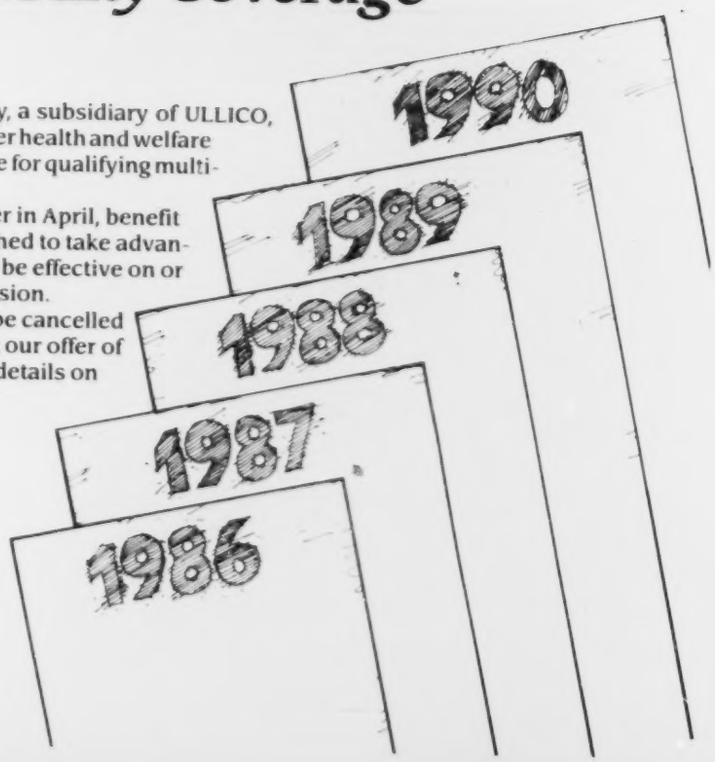

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Rating chart corrected

Salomon repeats as favored brokerage firm

The table showing the top Wall Street firms in terms of research and execution in the Sept. 29 issue was incorrect, and the correct table is published below.

As was correctly reported on the front page of the Sept. 29 issue, and in the story accompanying the table, Salomon Brothers Inc. had the best overall score followed by Merrill Lynch & Co. and Goldman, Sachs & Co..

By individual category, as correctly reported in the story, Merrill Lynch gained the highest number of points for equity research, followed by Goldman, Sachs and First Boston Corp.

Merrill received the highest number of first-place mentions, followed by Goldman and First Boston.

Goldman had the greatest number of second-place mentions and First Boston was most often named third.

In best equity block trading, Goldman was first overall, Salomon was second and Merrill was third. Goldman had the highest number of first-place mentions, followed by Salomon.

Salomon Brothers was most often named second and Merrill Lynch was most often named third.

In fixed-income research, Salomon led overall by a wide margin.

It was most often named first and second. Goldman was most often named third.

In fixed-income execution, Salomon Brothers was again most often named first and second. Goldman was most often named third. ■

How brokers rate on research and trade execution (number of mentions)

	Most often named 1st	Most often named 2nd	Most often named 3rd
Best equity research	Merrill Lynch (24) Goldman, Sachs (15) First Boston (7) Drexel Burnham (6) Salomon Brothers (5)	Goldman, Sachs (12) Merrill Lynch (11) First Boston (7) Kidder Peabody (7) Salomon Brothers (6) Donaldson Lufkin (6)	First Boston (10) Merrill Lynch (10) Drexel Burnham (8) Kidder Peabody (7) Morgan Stanley (6) Goldman, Sachs (5)
Best block trading	Goldman, Sachs (36) Salomon Brothers (17) Merrill Lynch (12) Morgan Stanley (5) Donaldson Lufkin (3) PaineWebber (3)	Salomon Brothers (19) Goldman, Sachs (17) First Boston (11) Merrill Lynch (11) Morgan Stanley (9) Kidder Peabody (2) C.J. Lawrence (2) Pru-Bache (2)	Merrill Lynch (10) Goldman, Sachs (10) Morgan Stanley (8) PaineWebber (8) First Boston (7) Smith Barney (6) Salomon Brothers (5)
Best fixed-income research	Salomon Brothers (37) First Boston (15) Merrill Lynch (7) L.F. Rothschild (3) Goldman, Sachs (2)	Salomon Brothers (20) First Boston (13) Merrill Lynch (11) Morgan Stanley (6) Goldman, Sachs (5)	Goldman, Sachs (13) First Boston (9) L.F. Rothschild (7) Morgan Stanley (5) Shearson Lehman (5) Merrill Lynch (4) Salomon Brothers (4)
Best fixed-income execution	Salomon Brothers (26) Merrill Lynch (17) Goldman, Sachs (9) First Boston (6) Drexel Burnham (3) L.F. Rothschild (3)	Salomon Brothers (18) First Boston (15) Merrill Lynch (11) Shearson Lehman (6) Morgan Stanley (5)	Goldman, Sachs (10) Salomon Brothers (9) Morgan Stanley (7) Drexel Burnham (5) First Boston (5) Pru-Bache (3)

Best stock market technician

Technician	Total weighted points
John Mendelson	88
Robert Farrell	82
Alan Shaw	26
Ralph Acampora	10

Best Wall Street economist

Economist	Total weighted points
Edward Hyman	124
Gary Wenglowski	50
Edward Yardeni	39
Gary Schilling	10

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Bransford joins Eager as partner

ATLANTA — Roger Bransford, managing director at William M. Mercer-Meidinger Inc. and head of its asset planning services unit in Atlanta, has resigned to join D.L. Eager Associates, Louisville, Ky., as a partner.

Mr. Bransford's resignation is effective Oct. 31. Douglas Stegner, vice chairman at Mercer-Meidinger, will replace Mr. Bransford temporarily as head of the asset planning services unit.

Mr. Stegner said no decision had been made on a permanent replacement for Mr. Bransford, and no change in course is anticipated for the asset planning services operation, which helps pension funds set asset mix policy, hire investment managers and monitor their performance.

Mr. Bransford said he was anxious to return to a role with more contact with investment managers.

"I signed on at Mercer-Meidinger to get the organization through the consolidation phase of the merger (of William M. Mercer Inc. and Meidinger Inc.). Now the company is going to go through a growth phase and this seemed to be an appropriate time to leave," he said.

Mr. Bransford added the internal part of his job was greater than the external part, and was likely to become even more so, and he preferred to have more outside contact.

At D.L. Eager Associates, Mr. Bransford will be developing investment and marketing strategies for money management firms, helping to train marketing and sales people for those firms and developing marketing and presentation materials. He will open an office for the firm in Atlanta.

He noted he and Dave Eager, the firm's co-founder, had worked together as investment management consultants previously at A. G. Becker & Co. and at Meidinger.

Mr. Bransford rejoined Mercer-Meidinger 15 months ago from Meridian Management Co., Little Rock, Ark., where he was president. He had left Mercer-Meidinger in June 1984.

GM saving . . .

Continued from page 1

market it to other companies.

- Messages will be compatible with the standard electronic business data interchange standard — known as X12 and developed by the American National Standards Institute — allowing receiving companies to update their accounts receivable automatically without having to rekey the data manually.
- GM will encourage its suppliers to receive all trade information electronically, not just payments, to enhance their trade relationship and save costs, said Benson K. Woo, GM's director of worldwide banking and cash management.

At a minimum, he said, suppliers will have to receive payments electronically. For the suppliers incapable or unwilling to move completely to electronic data interchange, GM will use the ACH to send payments to them, while sending trade information separately either in electronic or paper form.

He indicated suppliers that don't move to a complete electronic system will be at a competitive disadvantage.

- As part of the system, GM has designed a security arrangement to require encryption and authetication of the electronic payments and data. Encryption gives transmissions privacy, while authetication provides a greater degree of security against unauthorized transactions.
- In moving to pay electronically, General Motors believes it has resolved a touchy issue with suppliers — the renegotiation of trade terms to adjust for the end of check float — by neutralizing its effects. Suppliers, however, have not yet been contacted on the new trade terms, Mr. Woo said.

Mr. Woo said the savings to the company in moving to electronic payments "is a humongous number." He declined to disclose the amount, calling it proprietary.

The Auto Industry Action Group, a Southfield, Mich., trade organization, has estimated the savings at $200 a car for moving the entire trade information flow, not just payments, to electronics. An estimate of the savings for just the move to electronic payments from checks was placed at about $50 to $100 a car. GM still will handle some information by paper.

"Those numbers become extremely compelling for the auto industry to consider electronic payment," Mr. Woo said. "We're attacking not production cost per say, but the fixed overhead." Mr. Woo, however, would not comment on how close the AIAG's estimated savings would parallel GM's own expectations.

Whatever the savings, the move hasn't yet caught the attention of the investment community. In interviews, several analysts said they were unfamiliar with the automaker's program.

Mr. Woo and T.R. Hart, manager of banking, while discussing GM's intention in general, hadn't released any details on the payment system until this month, though the automaker's plans were described in the July 21 issue of *Pensions & Investment Age*, based on interviews with automotive and banking sources.

Mr. Woo said the electronic system will enhance factory efficiency, including such concepts as just-in-time inventory, which requires the quick coordination of trade information and payments, as well as delivery of parts.

Roger J. Cadaret, managing director of the AIAG, called GM's move to electronics a catalyst.

While many corporations now use electronic payments for special purposes, he noted the use for corporate trade payments has been limited. Speaking of GM's move, Mr. Cadaret said, "I think it's extremely important.

"It's a very strong signal that the majority of industry will be using electronic funds transfer in the near future."

The other two major auto companies are moving at different paces to electronic funds transfer.

Chrysler Corp. now pays 50 major suppliers electronically and hopes to get its other 350 major suppliers — those that produce at least 50 invoices a month — on electronic payments, according to Henry Nauka, general supervisor-accounts payable.

Ford Motor Co. hasn't moved to an electronic payments yet (*P&I Age*, Aug. 6).

Mr. Woo stressed the significance of GM's move is the exchange of all information between the company and its suppliers, not just substituting electronic for paper payments.

"Prior efforts by the banking industry to promote the widespread use of EFT for corporate trade payments have not succeeded," Mr. Woo said.

"Historically, efforts on corporate EFT have concentrated on simply changing a paper check to a stream of electrical signals. The difference with the approach taken by GM and its banks has been to recognize that the movement of the related information on a check has become as important as the movement of the funds themselves."

The importance of GM's move "is not one of electronic payments, but rather of the emergence in corporate America of electronic business data interchange between companies," Mr. Woo said during an electronic payments conference earlier this year.

Mr. Woo said the move will make General Motors the first U.S. corporation to convert all of its corporate trade payments from paper checks to an electronic form.

In all, he said, General Motors now issues 400,000 checks a month, totaling $4 billion.

To send the payments and trade information electronically, GM has set up a network of eight banks around the country. Mr. Woo declined to name the banks, but executives at several of the banks confirmed they are: Chase Manhattan Bank, Chemical Bank and Citibank, all of New York; Pittsburgh National Bank; Manufacturers National Bank of Detroit; National Bank of Detroit; First National Bank of Chicago; and Bank of America, San Francisco.

First Chicago "served as the lead bank of General Motors in creating the system and developing software," said Timothy A. Wayman, the bank's vice president and project manager for electronic payments.

E.I. du Pont de Nemours & Co., Wilmington, Del., supplies paint and other material to GM. Lee K. Foote, the chemical company's section manager of electronic data interchange, said Du Pont officials already have been approached by GM to be paid electronically. "Such a dominant industrial corporation pushing it and the vast number of corporations it affects is bound to be a major stimulus to electronic data interchange and electronic funds transfer," Mr. Foote said.

He said Du Pont intends to deal with GM through one of the eight banks, because of the compatibility with the ANSI transmission standard.

Although he noted the ACH will begin to install a ANSI compatible format called corporate trade exchange early next year, Mr. Foote said, "There will be virtually no banks capable of receiving CTX."

"There wouldn't be a CTX format now, at least, but for the fact Benson Woo took a very strong stand two years ago," Mr. Foote said. Before then, he said, "there was no talk of (the National Association of Automated Clearing Houses) sitting down with ANSI to develop a standard."

He said Du Pont hasn't quantified its own potential savings from GM's electronic system. "From a supplier's point of view, the things we suppliers do to help our customers do business more efficiently is to our benefit," he said.

He said Du Pont and GM now exchange electronically material release and shipping notices, though invoices are still on paper.

William R. Moroney, NACHA president and chief executive officer, said of GM's system, "It will probably increase the use of electronic payments because GM will be making a lot of payments electronically that it hadn't been making before.

"Exactly how they are going to do it, I'm still uncertain."

He said he has had discussion with Mr. Woo, but "I've never been able to get a straight answer from those at GM who have criticized the (ACH) system other than it doesn't have authentication or encryption."

"I suspect the pressure GM is putting on will get more banks to get involved in information processing."

The NACHA is "never going to be the leading edge" in EFT, he said. "I can't blame GM for stepping on the gas to get the system moving."

Under its system, GM will send a supplier's payment and trade information to any of the eight banks.

A supplier dealing with that bank or any of the other seven then will receive the payment electronically and, if it chooses, the trade information.

For suppliers dealing with other banks, GM will continue to bundle the payment and data, sending it to one of the eight network banks electronically. The bank then will unbundle the package, sending the payment through the ACH, while sending the information separately to the supplier.

"Obviously, not all 20,000 suppliers are going to choose to bank at one of these eight banks," Mr. Woo said.

"It's not a private payment system. We are not requiring our suppliers to bank at these banks. We don't think that is the right thing to do. Suppliers should have a right to choose their bank."

He suggested suppliers that continue to receive some information by paper will be at a competitive disadvantage. "I think suppliers will find it to their own advantage to move electronically," Mr. Woo said. "It will cost us more money to move information by paper and it will cost the supplier more money to process information by hand."

He said the electronic payment neutralizes the loss of check float. The GM study shows the float for suppliers is consistent, averaging three days. He said GM isn't planning to negotiate the float adjustment with each supplier.

He said GM will begin to move suppliers for eight divisions, including three major automotive divisions — CPC, for Chevrolet, Pontiac and Canadian-built vehicles; BOC, for Buick, Oldsmobile and Cadillac; and trucks and buses to the electronic system by the end of the year. ■

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Passive investments . . .

Continued from page 3

"tentative" moves. They are to be presented to the New York City Board of Estimate for approval Oct. 23.

Besides Wells Fargo and Boston Co., big winners in number of new accounts were Newbold's Asset Management, Philadelphia, and Dana Investment Advisors, Milwaukee, with six each. Newbold's accounts were all for equities, while Dana's were for investment in Small Business Administration loans.

Six traditional investment management firms had five new accounts reported. They are Bear Stearns Asset Management, Sanford C. Bernstein & Co. and Dreman & Embry Inc., all of New York; Harris Trust and Savings Bank, Chicago; Loomis, Sayles & Co., Boston; and Lowe, Brockenbrough, Tierney & Tattersall, Richmond, Va.

Several limited partnerships in real estate, leveraged buy-outs or venture capital had five or more new clients reported. John Hancock Apartment Fund Limited Partnership, Boston, closed with eight pension fund clients. Interven Partners, a Los Angeles-based venture capital fund, had eight tax-exempt investors reported.

Forstmann Little Subordinated Debt & Equity III, an LBO fund, had five tax-exempt investors reported, as did Bridge Capital Investors II, a venture capital partnership. Both funds are based in New York.

Managers that lost big chunks of business in the quarter included two terminated by the Illinois universities' system — American National Bank & Trust Co. of Chicago, which ran $445 million in a stock index fund, and Lehman, which handled $330 million in an active bond strategy.

Also losing big accounts were two active bond specialists terminated by Mississippi — MacKay-Shields Financial Corp., New York, which ran $263 million, and Wentworth, Hauser & Violich Inc., San Francisco, with $246 million. ■

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10/29/86 C2710-2

GMAC deal reduces leverage from car loans

By Marci Baker

DETROIT — The full impact of General Motors Co.'s low-interest automobile financing program to reduce 1986 inventory surfaced earlier this month in First Boston Corp.'s record-breaking $4 billion sale of securities backed by those loans.

General Motors Acceptance Corp.'s sale of some $4.2 billion of those assets will help reduce the finance subsidiary's increased leverage that came as a result of the low-cost automobile loans.

Meanwhile, the public debt market absorbed an issue of securities whose volume has been matched only by the $4 billion Eurobond offering in September by the United Kingdom.

First Boston breezed through the deal despite light participation by pension fund investors.

Although investment bankers doubt there will be an asset-backed deal of this magnitude again any time soon, the First Boston deal was being touted as adding a new dimension to the new asset-backed market. It not only defined the potential investing community for these types of securities, but also introduced a structure for issuing the securities that had previously only been used in the mortgage arena.

Corporate finance

Patterned after a collateralized mortgage obligation, First Boston set up a special purpose subsidiary, which purchased GMAC's below-market interest rate loans at a discount, then packaged and sold them in a three-tranche offering of securities.

The offering consisted of $2.1 billion of 6.25% notes with an average life of slightly more than a year, $585 million of 6.9% notes with a 2.2-year average life and $1.3 billion of 6.95% notes with a three-year average life.

The $4.2 billion face value of GMAC loans backing the securities was made up of about $2.3 billion of 2.9% loans with a sche-

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Pensions & Investment Age

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Inside:

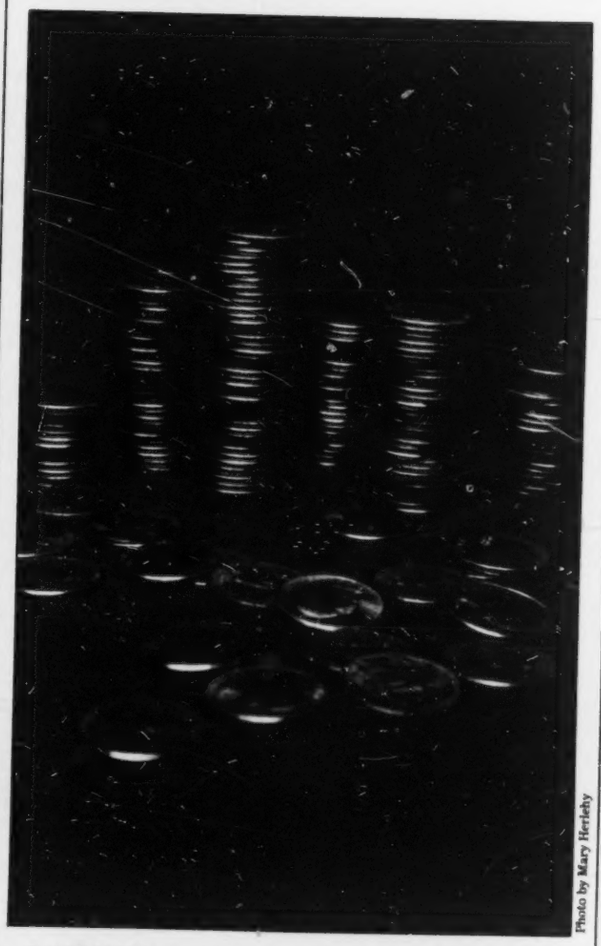

Photo by Mary Herlehy

CASH MANAGEMENT: Citibank, Mellon Bank and Chase Manhattan Bank turned up as the favorites of corporate cash managers, who in a *P&I Age* survey said they turned to those three heavyweights most often for major cash management services — page 17.

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Sherwin-Williams gets OK to borrow pension assets

By Richard Gillespie

CLEVELAND — Sherwin-Williams Co. — perhaps to finance possible acquisitions or forestall a potential takeover — has received approval from the Department of Labor to borrow up to $65 million from its $314 million pension plans.

At about the same time, the Cleveland building products company shelved plans to terminate two plans and recoup $108.2 million in surplus assets. A company spokeswoman, Dianne B. McCormick, denied the two events were related.

Larry Pitorak, treasurer and chief counsel, declined to shed any light on the reasoning, saying only the request to borrow the assets was looked upon "as an opportunity that was made available under law."

Mr. Pitorak said he did not know whether the letter reversing the termination, which had been approved, was filed before or after Sherwin-Williams received permission to borrow from the pension funds.

The company's move on its pension assets puzzled some analysts, who wondered why a company in good financial health and with $170 million in cash would want to borrow from its pension plan when it could easily obtain money on the open market.

Sherwin-Williams' debt is rated BBB by Standard & Poor's Corp., Baa1 by Moody's Investors Service, 5A2 by Dun & Bradstreet Corp. and 7 by Duff & Phelps Inc., all investment-quality ratings.

The company has embarked on an ambitious expansion program, opening new home-decorating stores, and may be considering an acquisition in the home improvements area.

But several analysts suggested the Labor Department exemption is related to a long-standing fear among the company's executives that the plan, overfunded on a termination basis by $113 million as long ago as Jan. 1, 1985, might attract a corporate raider.

Should such a raider emerge, the company would be in a position to clear out excess funds and use the proceeds to fend off an attack, the analysts said.

"It has been speculation for a while that they would do something with that (overfunding). They feel it makes them more of a takeover target," said a Cleveland-based investment analyst who spoke on condition that he not be identified.

The analyst noted the company already is sitting on $170 million in cash, and is looking for a buyer for its Grey Drug Fair Inc. subsidiary, the sale of which would generate even more cash. The sale of Grey Drug Fair could bring in as much as $200 million, analysts have estimated.

Whether the company is gearing up for an acquisition of some kind, or is trying to reduce temptation for potential raiders, the loan is a highly innovative approach to pension fund investment.

Ms. McCormick, the Sherwin-Williams spokeswoman, pooh-poohed the overfunding/raider explanation as only a theory. "Nothing has been filed that would suggest the company is under threat of a take-

Continued on page 70

Employees awarded surplus plan assets

By Richard Gillespie

In what may be a first in pension fund law, a federal appeals court in Cincinnati has ruled the surplus from a terminated pension plan should go to plan members, not to the company.

As a result, attorneys for International Fruit Products Inc., Covington, Ky., have filed a petition with the U.S. Supreme Court in Washington, seeking a review of the decision. If the Supreme Court agrees to take the case, it would be the first time it has ruled on the thorny question of who owns the assets underlying a defined benefit pension plan.

The International Fruit case arose when the company terminated its $200,000 pension plan in July 1982, distributed $61,000 to plan participants and took back the rest. A number of employees filed a class action suit challenging the company's recouping of the surplus assets.

Judge Carr Rubin in the U.S. District Court for the Southern District of Ohio in Cincinnati upheld the company's reversion, but the employees appealed the decision to the 6th U.S. Circuit Court of Appeals, Cincinnati.

In the 2-1 decision, the appeals court ruled the surplus assets in the International Fruit plan belong to the employees.

U.S. district judges in several cases during the past four years have ruled that irrespective of plan wording to the contrary, surplus assets in a terminated plan belong to the company.

"Although plan documents have been clear (in granting employees

Continued on page 70

L.A. County wins bond exemption

By Steve Hemmerick

LOS ANGELES — Los Angeles County officials could save an estimated $200 million as a result of winning an exemption in the new tax reform law to float pension bonds.

The potential savings would come, with retirement board approval, from the county floating $500 million in tax-exempt bonds, which carry a lower interest rate, and simultaneously buying $700 million in bondlike annuities, which pay a higher interest rate.

Like other municipalities, LA County would issue the bonds to reduce its pension plan's unfunded liability, to

Continued on page 73

New York City Mayor Edward I. Koch, left, and Comptroller Harrison J. Goldin

NYC police fund shifts $1.97 billion

By Trudy Ring and Chuck Paustian

NEW YORK — Mayor Edward I. Koch and Comptroller Harrison J. Goldin set aside their political differences long enough to approve the redistribution of more than $1.97 billion in fixed-income assets of the $4.6 billion New York City Police Department Pension Fund.

The police fund selected 10 new investment managers, reassigned another manager and released two management firms in the reallocation of assets. The decisions are pending final approval of the board of trustees.

Messrs. Koch and Goldin, both trustees for the city's five retirement plans, have disagreed over an appropriate South Africa divestiture policy for the funds. Mr. Goldin has advocated divesting all equity holdings in banks with loans outstanding to South African banks, while Mr. Koch has said this is impractical.

The restructuring of the police fund is part of a program to redistribute all the city funds' fixed-income portfolios.

The New York City Fire Department Pension Fund and the New York City Employees Retirement System are expected to realign their portfolios within the next several months.

The New York City Teachers' Retirement System finished its redistribution during the third quarter (*Pensions & Investment Age*, July 21).

The restructuring process involves dividing the portfolio into four sectors — government-backed assets, mortgage-backed assets, corporate assets and foreign assets — and gives fund officials tight control of investments.

Managers selected for the government-backed sector, and the amounts allocated, are: Mellon Bank, Pittsburgh, Wells Fargo Investment Advisors, San Francisco and The Putnam Advisory Co. Inc., Boston, $300 million each; Fischer, Francis, Trees & Watts Inc., New York, $145 million; and Investment Advisers Inc., Minneapolis, $140 million.

Managers selected for the mortgage-backed sector, allocated $138 million each, are: Pacific Investment Management Co., Newport Beach, Calif.; Miller, Anderson & Sherrerd, Bala Cynwyd, Pa.; and Bear Stearns Asset Management, New York.

Bankers Trust Co. — Investment Management Group, New York, and T. Rowe Price Associates Inc., Baltimore, are the managers selected for the corporate asset sector to run $160 million and $156 million, respectively.

Fiduciary Trust Co. of New York, which had managed a $116 million fixed-income account, was retained by the police fund to manage $59 million in the foreign asset sector.

The assets allocated to the new managers came from the reduction of Fiduciary Trust's account and from terminated accounts managed by Citibank and Lehman Management Co. Inc., both in New York. Citibank had run $1.5 billion for the fund, while Lehman had run $212 million.

Steven Matthews, assistant comptroller for the city, said all the changes were a direct result of the restructuring.

"It does not necessarily indicate dissatisfaction with the performance of the firms currently employed," said Mr. Matthews.

Although Citibank is among those U.S. banks with loans outstanding to South African banks, Mr. Matthews said the termination of the bank's management was not related to the divestiture issue. "The one has nothing to do with the other," he said.

Although Messrs. Koch and Goldin have disagreed over the divestiture issue in the past, it was not a factor in the restructuring, Mr. Matthews said. He said both officials approved the restructuring.

"We have a difference of policy and position on whether the pension funds should maintain its share holdings in Citibank and other banks doing certain business with South Africa," he said, adding, however, that issue did not relate to other contractual arrangements with those institutions.

"Any suggestion that this is based on (the South Africa divestiture issue) is simply not based on fact," Mr. Matthews said.

He also said police union members on the board of trustees indicated they took the money from Citibank because of the inability of police officers to cash their checks at any of the bank's branch offices.

"That thing has been a problem between Citibank and the police union for a number of years," Mr. Matthews said.

"It's a problem outside the purview of any government office. To the extent the union wants to say that was the reason they took the money away, fine.

"As far as we were concerned, Citibank did not get any money because its proposal was not as competitive as other proposals."

Hires 5 managers, drops 2

Morton-Thiokol realigns equity

By Chuck Paustian

CHICAGO — Morton-Thiokol Inc., with about $500 million in pension assets, made a tactical change in its investment strategy, reportedly reallocating between $100 million and $200 million to five new equity managers.

Although Morton-Thiokol officials would not comment on the change, sources confirmed the five managers were hired because their management styles complemented the investment approaches of the three equity managers the company retained.

At least part of the assets allocated to the new managers came from accounts previously run by Fred Alger Management Inc., New York, and Mathers & Co. Inc., Chicago, both released by the company.

The 1986 Money Market Directory listed two other companies — CIGNA Asset Advisers Inc., Hartford, Conn., and The Northern Trust Co., Chicago — as equity managers.

A spokeswoman for Northern Trust said the bank does not manage equity money for Morton-Thiokol, but does invest some assets in a short-term fund. Executives of CIGNA could not be reached for comment.

Northern Trust was retained as master trustee.

The changes were not expected to significantly alter the fund's equity exposure.

As of Dec. 31, 1984, the most recent figures available, the approximate asset mix was 48% equities, 25% general insurance accounts, 17% cash and short-term instruments, 9% pooled bonds and 1% guaranteed investment contracts.

The company's eight equity managers each run between $20 million and $40 million.

The five managers hired, and their investment styles, are: William Blair & Co., Chicago, emerging growth; Hahn Holland & Grossman, Chicago, value-oriented; KR Capital Advisors Inc., New York, Graham and Dodd; Concord Capital Management, San Mateo, Calif., theme manager; and John A. Levin & Co., New York, bottom-up stock selection.

The three firms retained by Morton-Thiokol, and their styles, are Investors Research Corp., Kansas City, Mo., growth; Lynch & Mayer Inc., New York, special situation; and Value Line Asset Management, New York, rotational and value.

"This is the perennial garden approach to management," said one industry source who asked not to be identified.

"You want some things to come up in March, some in June and some in September. I think they did a good job of putting this package together."

Sources said the fund's consultant, Rogers, Casey & Barksdale Inc., Stamford, Conn., aided in the restructuring, but that most of the work was done internally. ■

Bill Quinn is scaling back

By Fred Williams

FORT WORTH — William F. Quinn, assistant treasurer-funds management at American Airlines, doesn't carry as much weight around the international air carrier's corporate headquarters as he once did.

Not that the personable Mr. Quinn has been demoted or downgraded in any way. Indeed, his reputation in the pension industry as an innovator continues to grow.

But Mr. Quinn will not be able to throw his weight around at American any longer because there isn't as much to throw around.

Mr. Quinn, who is 5 feet 7 inches tall, intentionally shed 40 pounds since last year.

He did it the hard way, too. He cut back on his food intake and exercised to the point where he actually started enjoying it. He recently played eight tennis matches in two days, a feat which, while it would punish a normal adult, might cause even Jimmy Connors to pause.

Quinn

Mr. Quinn, who is responsible for overseeing American's $3 billion in pension assets as well as another $1 billion in corporate cash, made up his mind to lose weight and went from 205 pounds in early 1985 to 165 now. In the process, he lost 6 inches from his waistline and had to purchase a new wardrobe to accommodate his new slim, some might say svelte — some might even say skinny — torso.

"It wasn't easy," Mr. Quinn said. But he shared his secrets:

- Cut out all the good foods — including starches, sweets and pasta — and then exercise.
- Eat only fresh vegetables, fish and meats — and exercise.
- Cut out the snacks — and exercise.
- Don't eat before going to bed — and exercise.

"I started getting very active in racquetball and tennis. You'll

Continued on page 69

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500 stock index, the Russell 3000 stock index, the Ryan Index of fixed-income securities and the Shearson Lehman Government/Corporate bond index.

***P&I Age* September indexes**

	Latest mo.	Year to-date	Trailing 12 mos.
S&P 500	−8.28	12.41	31.76
Russell 3000[1]	−7.7	12.1	31.1
Ryan Index[2]	−1.96	14.68	24.48
Shearson Lehman Gov't./Corp.[2]	−1.25	12.16	20.65

Source: Rogers, Casey and Barksdale Inc.

[1]Frank Russell Co. [2]Fixed income.

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Managers find different paths to success

TSA picks strategic asset allocation route

By Joel Chernoff

LOS ANGELES — Using an innovative asset allocation system based on futures contracts, TSA Capital Management has raked in more than $1.6 billion in assets to manage or overlay in just two years of business.

"Strategic asset allocation," an increasingly popular style of management, enables a pension fund to adhere to a long-term asset allocation strategy while making short-term adjustments.

Robert Arnott

In its version, TSA uses futures to enable the underlying portfolio to remain undisturbed, while swiftly shifting exposures to stocks, bonds and cash at a fraction of the cost of trading the actual securities.

In effect, the strategy amounts to a new form of market timing.

While admitting that pension executives have ribbed him for offering market timing under a new name, Robert D. Arnott, TSA's president and chief investment officer, argued that past efforts by other money managers to time the market have been sloppy.

Those managers have done what felt "comfortable" — rarely a sound basis for making an investment decision, he said, in contrast to TSA's highly disciplined and quantitative approach.

"Most plan sponsors themselves are not that involved in asset allocation," said James Eckmann, director-investments and banking for Dayton Hudson Corp., Minneapolis, and a TSA client. "In a sense, I believe (TSA's strategy) gives you more control because you can give one manager the job."

Mr. Arnott left The Boston Co. in the

Continued on page 71

Sarofim leaves oil, travels consumer road

By Fred Williams

HOUSTON — After a loss of about $1 billion and nearly 50 clients, Fayez Sarofim & Co. is making a comeback by moving out of the slumping energy sector and into consumer non-durables.

The legendary Houston money management firm now is generating returns that overshadow the Standard & Poor's 500 stock index.

Its performance was well above the S&P 500 for the two- and three-year periods ended June 30. It's only when returns from more than three years ago are examined that the firm's performance begins to fade.

According to *Pensions & Investment Age*'s 1983 directory of money managers, Sarofim had a total of $8.8 billion under management; $8.4 billion of which was for 227 tax-exempt clients. Those numbers changed to $8.6 billion total and $7.6 billion tax exempt for 191 clients as of the 1984 directory.

The client total fell to 179, according to the 1985 directory, while the firm managed $8.7 billion in total assets and $7.6 billion in tax-exempt assets.

The latest directory has Sarofim's client total on the rise at 184. The amount of assets under management had grown to more than $9 billion as of Jan. 1, of which about $8.3 billion was tax exempt.

Fayez Sarofim, chairman of the board and president, declined to be interviewed for this story. But William K. McGee, senior vice president, said the company has rebounded from the bad old days in 1983, when it lost an estimated $1 billion in business, largely because of the failure to abandon the energy stocks before the market collapsed.

Sarofim no longer carries an above-market weighting in major oil company stocks, even though energy stocks are picking up steam and were the best-performing group during the third quarter.

Mr. McGee said the firm now carries only an 8% to 10% weighting in energy stocks in its $8.9 billion equity portfolio. The firm has a total of $10.8 billion under management. That compares with roughly 40% weighting in the energy sector in 1980.

Continued on page 71

Enron uses surplus for ESOP formation

By Fred Williams

HOUSTON — Battling corporate raiders and taking advantage of tax reform savings, Enron Corp. of Houston will use a $230 million pension asset reversion to purchase a large block of its common stock from a corporate raider for a new employee stock ownership plan.

The stock purchase is a departure from previously announced plans to use the surplus pension assets to reduce corporate indebtedness as a result of the merger between Houston Natural Gas Corp. and InterNorth Inc., Omaha, Neb. Enron is the name of the new corporate entity; it is terminating an InterNorth pension plan.

Enron debt following the merger was estimated at $4.2 billion.

The company will finance the new leveraged ESOP by effecting a tax-free rollover of the $230 million reversion, which will be supplemented with a "tax-advantaged" bank loan of about $105 million.

The new ESOP will purchase 7.4 million shares of Enron common stock from Minneapolis investor Irwin Jacobs and Leucadia National Corp., New York, an investor group.

The purchase was criticized by other investors as caving in to "greenmail;" the company agreed to pay about $47 per share and the stock had been trading around $44 on the New York Stock Exchange.

Mark Koenig, director of pension investments at Enron, had no comment on the greenmail charges. He said one significant reason for the change in plans for the asset reversion is tax reform, "which allows a transfer of assets from a terminated plan to a qualified ESOP to avoid federal income tax and excise taxes."

Mr. Koenig said the rollover also will reduce, by $20 million annually, future corporate contributions to existing employee benefit plans. Total savings to the company from the rollover and reduction in contributions, as well as the deductibility to Enron of dividends paid on common shares owned by the new ESOP, will be approximately $45 million, according to a company spokesman.

InterNorth merged with Houston Natural Gas in July. InterNorth had filed for a spinoff/termination of its two defined benefit plan with assets of approximately $500 million, seeking to recapture the $230 million surplus effective June 30 (*Pensions & Investment Age*, May 12).

The new Enron defined benefit plan was centered around the HNG plan, which has assets of between $75 million and $100 million, said Mr. Koenig.

Other companies have used excess pension assets to establish ESOPs. Bank of New York and Hartmarx Corp., for example, transferred excess assets to ESOPs without terminating existing plans.

Several InterNorth money managers were asked to liquidate their positions following the merger. Some insurance companies with guaranteed investment contracts were carried over to the new plan, Mr. Koenig said.

Terminated managers were Alliance Capital Management, Minneapolis, equities; Citicorp, Houston, equities; Comerica Bank-Detroit, fixed income; Mellon Capital Management, San Francisco, equities; Equitable Life Assurance Society of the United States, New York, real estate; and First National Bank of Boston, real estate. Equitable and FNB Boston were retained as GIC managers.

Hewitt Associates, Houston, HNG's actuary, took over as actuary for the new plan. Towers, Perrin, Forster & Crosby, Philadelphia, was the InterNorth actuary.

In January, Northern Trust Co., Chicago, will become the master trustee for the new plan, replacing State Street Bank & Trust Co., Boston, Mr. Koenig said. Chase Manhattan Bank, New York, was trustee for the InterNorth plan.

Mr. Koenig emphasized the manager terminations were not related to performance "but solely for accumulating cash for repositioning . . . They did a very good job for us."

Annuities have been purchased for participants in the terminated plan from a major insurance carrier, said Mr. Koenig.

He said Enron is "currently

Continued on page 72

Bank management fees still inching up

By Brian Lehrer

The investment management fees of banks and trust companies continue to climb to more competitive levels, although they still are considerably lower than fees charged by investment counselors, a new survey shows.

This trend was especially visible in small banks and trust companies, which raised fees an average of 6% in the past year.

Data from a survey of 175 investment firms by SEI Funds Evaluation Services, Chicago, also showed:

- Large banks and trust companies, those managing more than $3 billion, made only small changes in fees, a dramatic change from last year when they raised fees the most.
- Small counselors, those with less than $1 billion under management, charged the highest fees on balanced and

Continued on page 72

Investment management fees (in basis points)*

	Balanced (fund size ($ mils.))			Equity (fund size ($ mils.))			Fixed (fund size ($ mils.))		
Large counselors (more than $1 billion under management)	$10	$25	$50	$10	$25	$50	$10	$25	$50
Highest	100	100	90	100	100	100	69	56	51
25th quartile	75	65	55	80	70	56	50	43	38
Median	69	60	52	70	60	53	45	37	31
75th quartile	59	50	42	60	52	43	38	34	30
Lowest	45	35	30	45	34	27	25	25	22
Small counselors (less than $1 billion)									
Highest	100	100	100	100	100	100	88	85	70
25th quartile	90	70	60	100	76	64	50	41	37
Median	74	59	53	75	62	55	41	35	32
75th quartile	60	50	43	65	54	50	38	30	28
Lowest	42	29	27	42	29	27	30	26	19
Large banks and trust companies (more than $3 billion)									
Highest	75	60	50	75	60	50	50	47	41
25th quartile	61	51	46	61	52	46	48	36	31
Median	50	44	38	50	46	38	40	32	29
75th quartile	42	34	29	43	38	29	34	25	25
Lowest	32	25	20	32	25	20	25	20	19
Small banks and trust companies (less than $3 billion)									
Highest	75	75	65	100	85	80	75	57	43
25th quartile	60	56	52	60	60	52	45	39	32
Median	52	45	40	52	46	42	39	33	29
75th quartile	45	39	31	48	39	32	29	22	24
Lowest	26	20	18	26	20	18	19	15	15

* 100 basis points equal one percentage point

Source: SEI Funds Evaluation, Wayne, Pa.

Opinion

PBGC needs real aid quickly

A PERMANENT FIX FOR the Pension Benefit Guaranty Corp. cannot be delayed much longer.

With an unfunded liability of $1.7 billion already, the PBGC will find itself in a disastrous situation if The LTV Corp. terminates all of its plans, which have unfunded liabilities of about $2 billion.

Yet no relief for the beleaguered agency is in sight. Congress, which took four years of haggling to raise the insurance premium for single-employer plans to $8.50 per participant, has shown no sign it is even aware of the impending crisis.

And given the four years it took to win the most recent premium increase, it is unrealistic to expect Congress to react quickly to further help the PBGC even when it becomes aware of the danger. Indeed, it may not begin to act until the PBGC is unable to send benefit checks to the beneficiaries of the terminated plans whose liabilities it has assumed.

Only when the members of Congress begin to hear cries from retirees who are not receiving their expected pension checks is it likely to move. Unfortunately there are now no easy and painless solutions to the newest crisis.

If LTV terminates all of its plans and dumps the liabilities onto the PBGC, it would take a premium of $20 per participant to close the gap between the agency's assets and its liabilities.

Unfortunately, raising the premium to $20 might not be a solution. First, Congress is unlikely to go along with such a huge increase, and second, such an increase probably would drive more companies to terminate their defined benefit plans and replace them with defined contribution plans. This would further reduce the premium base and lead inevitably to further premium increases.

A possible solution has four parts to it.

First, in recognition that it established the PBGC without an initial capital infusion, with an arbitrarily established premium that was too low, and has dragged its feet on premium increases ever since, Congress should provide a needed capital infusion now. This capital infusion could be spread over, say, five years.

Second, the PBGC must have a risk-related premium. That is, the greater the unfunded liability of a plan, the higher the premium. And the premium should be increased annually automatically until a safe level of support for the PBGC is reached.

Third, stricter funding standards must be established for plans that are underfunded on a termination basis.

Fourth, corporations must become involved with the PBGC problem. Companies with well-funded defined benefit plans must help devise solutions to the agency's financing problem. It is in their long-term interests for the PBGC to be well funded.

Expand portfolio insurance's use

TRUSTEES OF DEFINED CONTRIBUTION plans should be seriously examining portfolio insurance for their beneficiaries.

Portfolio insurance applied to equity portfolios of defined benefit plans might change the way defined contribution plans are invested, to the long-term benefit of plan members.

Now, when they are allowed to select investments for themselves, members of defined contribution plans usually select fixed-income investments, often short-term investments and guaranteed investment contracts.

This is apparently because they fear the volatility, and the risk of loss, in the stock market.

Portfolio insurance can relieve that fear and encourage employees to put more of their defined contribution plan assets into stocks, which historically have had higher returns than bonds or cash equivalents.

Thus, participants in defined contribution plans might be able to make their retirement assets grow more rapidly than they now are doing.

Portfolio insurance does reduce the return an equity portfolio can earn, so it might lag the index. This would have to be explained to employees, but most understand there is no free lunch.

Where employees are not allowed to select the investment mix, trustees making the choice could be more secure in their equity investments if they were protected by portfolio insurance.

If it continues to work as advertised, portfolio insurance could be a boon for defined contribution plan participants.

Letters to the editor

Manager missing

To the Editor: Geoffrey Morley & Partners Ltd. was omitted from the April 4 directory of international managers.

Geoffrey Morley & Partners Ltd. has assets of $1,650 million under management for 35 clients. It specializes in equity management worldwide with an average asset allocation as of Sept. 30, 1986 of: U.K., 70%; U.S., 13.7%; Japan, 7.6%; Germany, 3.5%; France, 1.7%; Switzerland, 1.2%; Sweden, 0.3%; Australia, 0.2%; and cash, 1.8%.

It has been registered with the SEC since December 1984.

The client contact is Brian Shearing, marketing director, 16 Southampton Place, London, England WC1A 2AJ; 011-441-242-4441.

Brian Shearing
Marketing director
Geoffrey Morley & Partners
London

Beutel, Goodman

To the Editor: I am enclosing the questionnaire on Beutel, Goodman International, an international money manager.

BGI was not a client of ours last year, so we did not receive a questionnaire from *Pensions & Investment Age* for this year's publication. It would very much be appreciated if you could publish this information.

Beutel, Goodman International PLC, 37-39 St. Andrew's Hill, London, England EC4VBY; 011-44-01-489-0218.

Total assets under management March 31 were $68 million, all from one U.S. tax-exempt client. Of that, $51 million was invested globally, with equity assets most heavily committed to Germany, the United States, Japan, the United Kingdom and Australia.

The remaining assets are in U.S. bonds.

Minimum account size for individual management is $10 million.

The investment philosophy is called Base Plus. "Base" investments offer strategic appreciation and diversification in the major debt and equity markets. "Plus" investments are more opportunistic and excess-return oriented in all markets. BGI invests heavily in strong, healthy economies, while underweighting weaker countries and currencies.

The firm has non-U.S. currency hedging capability and has been registered with the Securities and Exchange Commission since 1985.

U.S. and non-U.S. assets under management by the parent organization and affiliates as of March 31 totaled $5 billion.

Client contact is Barbara Greer, Fairfield Capital Associates Inc., 1720 Post Road East, Westport, Conn.; (203) 254-1215.

Barbara Greer
Administrative assistant
Fairfield Capital Associates
Westport, Conn.

D.A. corrects info

To the Editor: The information included in the Sept. 15 real estate investment managers directory contained some inaccurate information:

D.A. Management Inc.
7777 Center Ave. Suite 500
Huntington Beach, Calif. 92647
(714) 891-6080

Total assets as of June 30 were $84 million, of which $74 million were tax exempt; $34 million was in real estate equities and $50 million in mortgages.

As of June 30, D.A. Management's equity holdings for tax-exempt clients had a book value of $20.9 million. Mortgage holdings had book value of $28 million.

Contributions received but not invested accounted for $4.3 million in equity and $22 million in mortgages.

All tax-exempt assets were in direct, separate accounts: 95% is in existing properties and 5% in development properties.

Asset mix by property type (including mortgage and real estate equities) was commercial, 45%; residential, 42%; industrial, 13%. D.A.'s current emphasis is on commercial and industrial properties in Southern California and Arizona.

D.A. has two distinct types of portfolios, one consisting of standard institutional type investments and the second of aggressive venture capital-type real estate transactions.

All properties are managed in-house, with on-site personnel where necessary.

Clients include the San Bernardino County Employees and Orange County Employees.

Daniel M. Ardell, president, is in charge of making property investments and is client contact.

Margaret Sadler
Account manager
Huntington Beach, Calif.

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CIRCULATION DEPARTMENT: Barbara Kisch *(Manager)* 313/446-0478, *(PIPER subscription)* 313/446-0478, Patricia McMikel *(Subscription info.)* 313/446-0421, Carolyn L. Vincent *(Back copy sales)* 313/446-1600

PUBLISHING DIRECTOR: Stephen D. Gilkerson

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Cash Management

Citibank, Mellon, Chase lead in survey

By Barry B. Burr

Citibank, Mellon Bank and Chase Manhattan Bank are the banks most frequently used for major cash management services, a *Pensions & Investment Age* survey of corporate cash managers shows.

In responses to questionnaires asking the cash managers to cite the banks most frequently used for lockbox, cash concentration, disbursement, lending and originating intercorporate payments through the automated clearinghouse, none of the three banks was named consistently in all of the major services.

The varying degree cash managers use the three banks was underscored in three services:

- For lockbox, Pittsburgh-based Mellon was named most often, while its two New York-based money center counterparts placed far out of the top 10.
- For disbursement and for lending, Citibank and Chase were named first and second, respectively, in each service, while Mellon placed, respectively, sixth and fifth.

For the other two major services — concentration and ACH, the three banks were together in the top three.

The survey showed other banks used most frequently overall for the five major services were Morgan Guaranty Trust Co., New York; Bank of America, San Francisco; Wachovia Bank & Trust Co., Winston-Salem, N.C.; Manufacturers Hanover Trust Co., New York; RepublicBank Dallas; First National Bank of Chicago; and Chemical Bank, New York.

Closely trailing the top 10 were NCNB National Bank, Charlotte, N.C., and Texas Commerce Bank, Houston.

The tables on this and following pages show the most used banks in each of the five services as well as their total mentions by the cash managers surveyed.

In addition to the five major services, *P&I Age* surveyed corporate treasury executives on their use of other cash management services — multilateral netting, commercial paper issuing and master note borrowing.

Also, the survey tallied the major cash management services corporations, and their bank providers, added and dropped since the beginning of the year.

The results were compiled from 130 responses to questionnaires *P&I Age* mailed to 500 domestic cash managers in a wide cross-section of corporations.

The responses were aggregated to assure anonymity of the responding corporations; a number of cash managers, however, agreed in follow-up telephone interviews to comment on the banks they use.

Of the respondents, 34% were from the Northeast (about half in New York), 24% from the Midwest, 10% from the Southeast, 15% from the Southwest and 17% from the West.

The survey listed separately Wachovia, First Atlanta, Wells Fargo and Crocker, even though they were involved in combinations during the year.

Wachovia Corp. and First Atlanta Corp., holding companies for the respective banks, jointly formed First Wachovia Corp. Dec. 5, to become parent of both corporations.

Both banks, and their holding companies, continue to exist as separate entities and communicate to clients under their own names, though many of their cash management marketing activities are now handled by First Wachovia Corporate Services Inc.

Wells Fargo Corp. acquired Crocker National Corp. June 1. As a result, Wells Fargo Bank assumed Crocker National Bank's activities.

If the banks had been combined in the survey:

- Wachovia/First Atlanta would have placed fourth with 46 mentions in overall cash management for the five major services. (Wachovia had 39 mentions; First Atlanta, 17.)
- Wells Fargo/Crocker would have tied for 11th place with 30 mentions in overall cash management. (Wells Fargo had 21 mentions; Crocker, nine.)

Of the five major services, the banks used most frequently by the respondents were:

- In lockboxes, Mellon, FNB Chicago, Northern Trust, Wachovia and RepublicBank Dallas.
- In cash concentration, Citibank, Mellon, Chase Manhattan, Chemical Bank and Morgan Guaranty.
- In disbursement, Citibank, Chase, Wachovia, NCNB and Texas Commerce.
- In lending, Citibank, Chase, Morgan Guaranty, Manufacturers Hanover and, tied for fifth, Bankers Trust, Bank of America and Mellon.

In other cash management services, the survey found:

- Nearly half of the responding cash managers use an outside manager to handle some short-term investments of their corporation's cash. In all, 25 of the cash managers reported using outside investment management companies or banks for corporate cash. Many of the corporations use at least three outside investment managers (the questionnaire asked for only each corporation's three major managers).

The most frequently mentioned was Merrill Lynch Capital Markets Inc., by eight cash managers. Others frequently named were Chase, Citicorp, First Boston Corp., Goldman, Sachs & Co. and Salomon Brothers Inc. Each was mentioned by three respondents. Others also often mentioned were Credit Lyonnais, Kidder Peabody & Co. and Mellon.

- Few corporations use multilateral netting, the practice of a corporation's units balancing their foreign currency positions arising from transfer payments among themselves.

Only 17 corporations reported using multilateral netting. In all, they reported using eight different banks. The most frequently named were Chase and Chemical, each cited by five corporate cash managers.

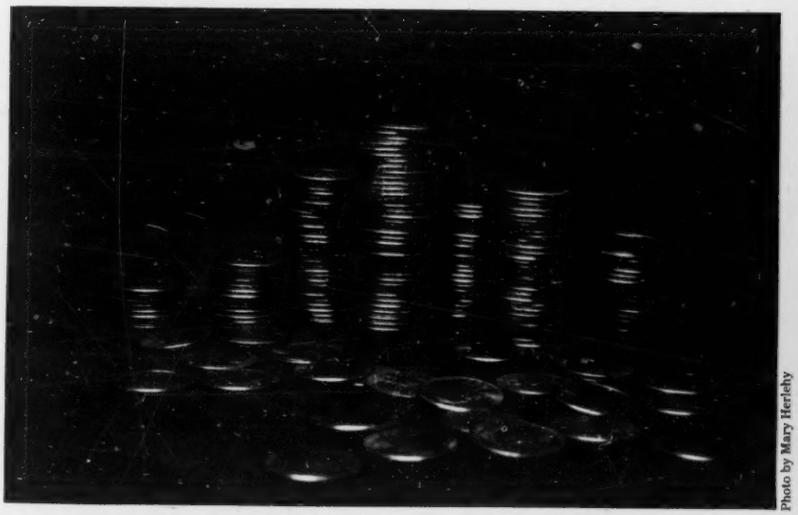


Photo by Mary Herlehy

- About a quarter of the respondents borrow through master notes, short-term instruments placed with bank trust departments. In all, 32 cash managers reported their corporations use master notes.

Citibank was the most often named master note lender, cited by five corporate executives. Chemical and Trust Co. Bank, Atlanta, each was mentioned by three.

Cited twice were Bankers Trust, Chase, MBank, Houston, Manufacturers Hanover and Sovran Bank, Richmond, Va.

- Most of the corporations — 71 respondents to the survey — borrow through commercial paper.

Continued on page 18

Overall cash management services*

Bank	Number of mentions
Citibank	71
Mellon	63
Chase Manhattan	58
Morgan Guaranty	42
Bank of America	39
Wachovia	[illegible]
Manufacturers Hanover	35
RepublicBank Dallas	33
FNB Chicago	32
Chemical Bank	31
NCNB	30
Texas Commerce	30
Citizens & Southern	24
Continental Illinois	24
Northern Trust	24
Mercantile Trust, St. Louis	22
Wells Fargo	21
Bank of New York	20
Bankers Trust	19
Security Pacific	19
FNB Atlanta	17
Harris Trust	15
InterFirst Bank Dallas	15
National Bank of Detroit	15
Sovran	14
Trust Co. Atlanta	14

* Banks most frequently mentioned by corporations surveyed for five key services: lockbox, cash concentration, disbursement, lending and automated clearinghouse.

Source: *Pensions & Investment Age* survey of corporate cash managers.

Payden & Rygel index of short maturity assets*
(for month ended September 30)

	September 1986	Quarter ended 9/30/86	Year to date	12 months ended 9/30/86	Yield level monthly change[a]
	Unannualized total returns				
90-day					
U.S. Treasury bill	0.4314	1.5980	5.2902	7.2812	3
Domestic CD	0.3916	1.6906	5.6649	7.8255	38
Euro $ CD	0.3953	1.7142	5.7424	7.9325	40
180-day					
U.S. Treasury bill	0.3482	1.7326	5.8264	7.8791	22
Domestic CD	0.2871	1.8104	6.0484	8.2742	39
Euro $ CD	0.2907	1.8432	6.1306	8.4151	40
1-year					
U.S. Treasury note	0.1897	2.0564	6.8093	9.3228	30
2-year					
U.S. Treasury note	−0.2939	2.4026	8.4345	12.5550	44

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. 90- and 180-day Treasury bill yield level changes on discount basis.

[a]Basis points.

Source: Payden & Rygel, Los Angeles

Computerized services on rise

By Barry B. Burr

GREENWICH, Conn. — The use of microcomputers, terminal-initiated services and electronic funds transfer by corporations is continuing to grow in most areas of cash management, according to a Greenwich Associates survey.

But the use of automated clearinghouses for corporate trade payables remains small, the survey by the Greenwich, Conn., firm found.

The findings were part of Greenwich's wide-ranging survey of corporate cash managers and treasury executives at corporations with more than $250 million in sales. Some preliminary findings were reported by *Pensions & Investment Age* Sept. 29.

In its survey of about 1,300 large corporations, Greenwich found 96% of the companies receive one or more kinds of computerized cash management information, nearly all of them by a terminal in the cash management executive's office.

Of the major types of information, 84% receive by terminal previous day reports on debits, credits and balances by bank; 64%, reports on wire transfers made within the past 24 hours; 56% current day reports of debits, credits and bank balances; 53%, float detail reports; 51%, lockbox receipts reports; 15%, bank target balances reports; 13%, account analysis statements; 11%, foreign exchange market information; 7%, domestic money market rates; 6% letter of credit status; and 5%,

Continued on page 20

Lockbox

Bank	Number of mentions
Mellon	21
FNB Chicago	19
Northern Trust	17
Wachovia	17
RepublicBank Dallas	15
Continental Illinois	12
Citizens & Southern	11
Texas Commerce	11
Bank of America	10
NCNB	9
Wells Fargo	9

Concentration

Bank	Number of mentions
Citibank	17
Mellon	17
Chase Manhattan	16
Chemical	13
Morgan Guaranty	13
Bank of America	11
FNB Chicago	9
Bankers Trust	7
Manufacturers Hanover	6
RepublicBank Dallas	6

Disbursement

Bank	Number of mentions
Citibank	26
Chase Manhattan	15
Wachovia	14
NCNB	13
Texas Commerce	11
Manufacturers Hanover	10
Mellon	10
Morgan Guaranty	10
Bank of America	9
RepublicBank Dallas	9

ACH for intercorporate payments

Bank	Number of mentions
Mellon	6
Chase Manhattan	5
Chemical	3
Citibank	3
Manufacturers Hanover	3
First Interstate	2
Northern Trust	2
Pittsburgh National	2
Wachovia	2
Wells Fargo	2

Source: *Pensions & Investment Age*

Citibank, Mellon . . .

Continued from page 17

The commercial paper dealer used most by the respondents — some corporations named up to three dealers as their issuers — was Merrill Lynch Money Markets Inc. It is used by 28 corporations in the survey.

Other commercial paper dealers, or primary placement agents, mentioned most often by cash managers were: Goldman, Sachs Money Markets Inc., by 20 corporations; Shearson Lehman Commercial Paper Inc., by 16; First Boston, by 14; Salomon, by seven; Bankers Trust, by five; Bank of America Capital Markets Corp., by three; Paine-Webber Inc., also by three.

Notable among the findings was that no New York bank ranked among the 10 named most often in lockbox.

Chicago had three banks — First Chicago, Northern Trust and Continental Illinois National Bank & Trust Co.

The Southeast had three banks — Wachovia, Citizens & Southern National Bank of Georgia, Atlanta, and NCNB.

Texas had two banks — RepublicBank and Texas Commerce — as did California (Bank of America and Wells Fargo).

Mellon was the only Northeastern representative among the 10 top banks mentioned in lockbox.

If combined in the survey, Wachovia/First would have placed first in lockbox with 23 mentions (17 for Wachovia, six for First Atlanta) and Wells Fargo/Crocker would have tied for ninth with 10 mentions (nine for Wells Fargo and one for Crocker).

In cash concentration, seven New York banks placed among the top 10. In disbursements, the four major Chicago banks — First Chicago, Continental, Harris Trust and Savings Bank and Northern Trust — ranked far outside the top 10.

In lending, New York banks again dominated, placing seven in the top 10.

In cash concentration, if combined, Wachovia/First Atlanta would have tied for seventh with nine mentions (five for Wachovia and four for First Atlanta) and Wells Fargo/Crocker would have tied ninth with seven mentions (three for Wells and four for Crocker).

In disbursement, if combined, Wachovia/First Atlanta would have placed second with 22 mentions (14 for Wachovia, eight for First Atlanta) and Wells Fargo/Crocker would have tied for ninth with nine mentions (six for Wells, three for Crocker).

In lending and ACH, neither Wachovia/First Atlanta nor Wells Fargo/Crocker would have changed in ranking.

In interviews, cash management consultants said *P&I Age*'s survey results generally confirm cash management market practices.

Richard J. Poje, principal, Treasury Strategies Inc., Chicago, and Larry A. Marks, president, Phoenix-Hecht Inc., Northfield, Ill., said they would expect no New York banks to appear high in lockbox.

Both said mailing times and availability aren't as good there.

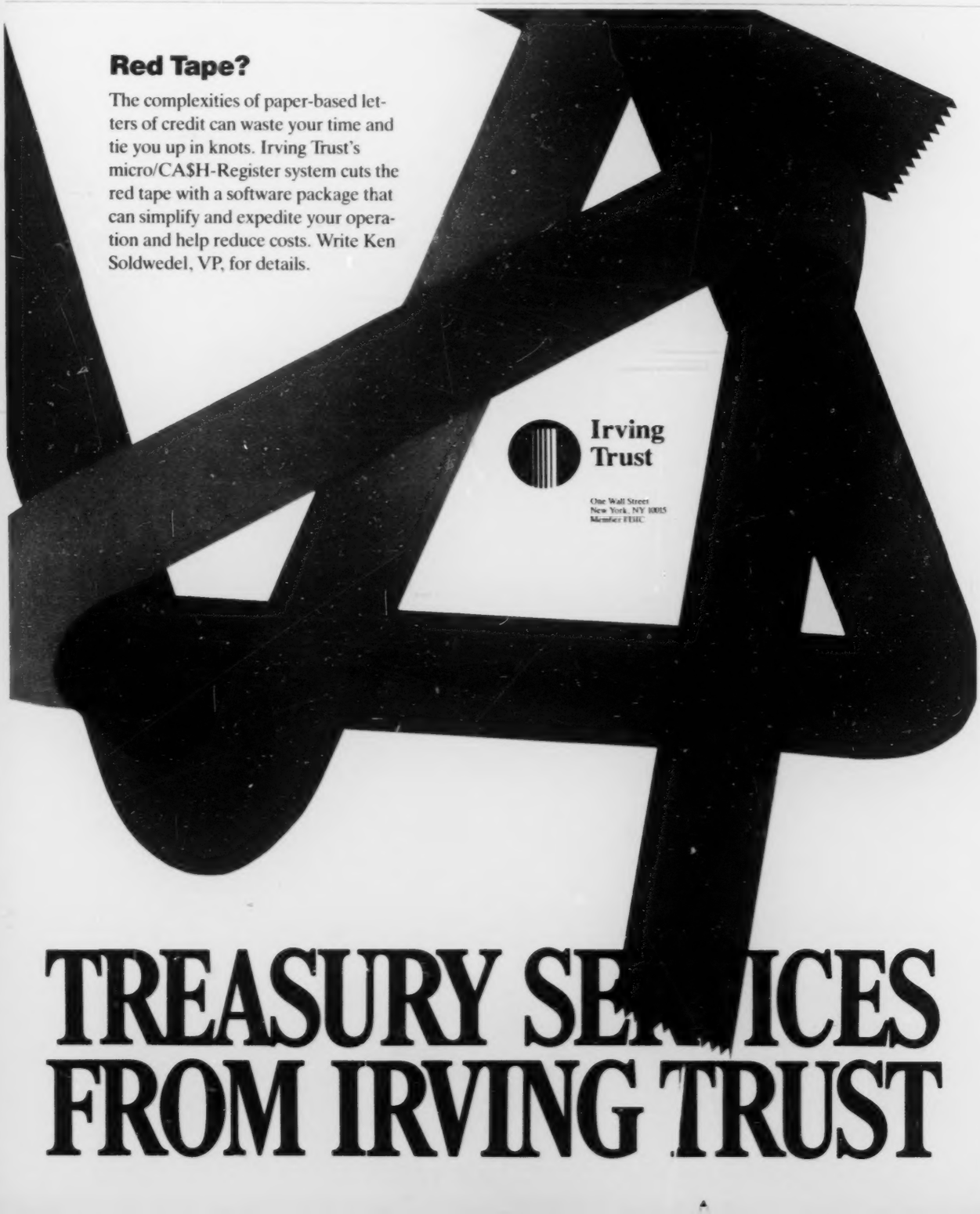
Mr. Poje added, "New York banks have not traditionally pushed hard their lockbox product. I have a sense they want to change," he added.

"My sense is you will see them emerge as major lockbox players," perhaps operating from outlaying locations. He said he knows of no specific program any New York bank has for increasing its presence in lockbox.

Of the top 10 in lockbox, Mr. Poje added, "Every one is a very significant lockbox bank." But he said he wouldn't have named them in that order and would have included Philadelphia National Bank and Harris Trust in the top 10. He said he was surprised NCNB ranked in the top 10.

On cash concentration, both Messrs. Poje and Marks said it was logical most of the oftenmentioned banks are in New York.

"The money typically concentrates in the money centers," Mr. Poje said. "The money in the United States tends to float to



Citibank . . .

Continued from page 18
New York City."

New York has the biggest money market for investing, while for borrowing, corporations tend to pay down loans through New York banks, he added.

In disbursement, Mr. Poje said, "My guts would have told me Wachovia would have been on top" through its Winston-Salem location. "I'm surprised Morgan (Guaranty) isn't up higher," he added.

He noted the money center banks disbursement from outlaying locations, such as Citibank from Wilmington, Del.

He surmised that no Chicago banks appear in the top 10 in disbursements because they "have little choice in locating control points" because of Illinois' banking regulation.

In lending, both Messrs. Poje and Marks attributed the predominance of New York banks to traditional relationships and the prevalance of corporations based there. Mr. Poje added, "You'd naturally think First Chicago would be in (the top 10) because of the size of its assets."

Among treasury executives who completed the questionnaire and agreed to comment, E.J. Goedeker, manager-banking and finance/investments, Monsanto Co., St. Louis, said he wasn't surprised Wachovia and Northern Trust ranked near the top in lockbox.

He praised their speedy postal delivery and clearing times. Monsanto uses Wachovia's Charlotte, N.C., location.

Lending

Bank	Number of mentions
Citibank	21
Chase Manhattan	18
Morgan Guaranty	18
Manufacturers Hanover	16
Bankers Trust	9
Bank of America	9
Mellon	9
Chemical	7
Security Pacific	6
Barclays	5
Continental Illinois	5
National Bank of Detroit	5

Source: *Pensions & Investment Age*

He said Monsanto wanted banks in those areas because of its customer locations and picked those two in large part because of efficiency of their operations over other banks.

Gary G. Pearson, assistant treasurer, NBI Inc., Boulder, Colo., said his company, which now employs three banks at three sites for lockbox, initially set up its lockbox in 1983 in Chicago with Northern Trust.

"A study we did showed Chicago was far and away the optimal site for a one-lockbox network," he said.

Since then, it added Wachovia and First Interstate Bank of California, Los Angeles.

In each of the three cases, he said, NBI considered other banks within the respective states — First Chicago, NCNB and Security Pacific National Bank & Trust Co., Los Angeles.

The major reason for selecting banks was quality of operations and availability of funds. Pric "was a consideration," he said. " look at that, but that wasn't th overriding factor."

But between the Chicago banks Mr. Pearson said, "pricing was factor."

He said First Chicago was mor expensive than Northern.

In addition, he said, NBI chos Northern because the bank al ready had automated its lockbo operation, while First Chicag was just becoming more auto mated.

Services . . .

Continued from page 20
from compensating balances t fees.

In particular, the survey found that among corporate cash management changes: 38% began using microcomputers; 35% instituted cost reviews; 33% switched to fees from compensating balances; 29% increased services they use; 18% consolidated services with their most important lending bank; 7% consolidated services with banks other than their most important lending bank; 6% decreased services they use; and 5% began using lockboxes.

Of the most important reasons for choosing their banks, the survey found that among the corporations: 80% need a bank in region; 78% have a long-term relationship; 60% use their major credit provider; 55% value specialist expertise and operations quality; 52% want willingness to customize services; 46% like improvements; 45% pick competitive pricing; 25% prefer new product innovation; 25% chose better clearing schedules; and 13% cited microcomputer expertise.

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U.S. market lags for third quarter

NEW YORK — The equity markets of Mexico, Hong Kong, Japan and Spain produced the best local currency returns in the third quarter, while those in the United States and the United Kingdom posted the poorest returns, according to Wood, Mackenzie & Co. Inc., New York.

The United States had the poorest return — −7% — in dollar terms during the third quarter.

The U.K. market had the second worst performance, returning only −5.7% in sterling, compared with the Morgan Stanley Europe Australia Far East index's 22.5% for the third quarter.

The winning local currency equity returns were 79% for Mexico, 20.9% for Hong Kong, 19.2% for Japan and 13% for Spain.

In Mexico's market, building materials and non-ferrous metals were top-performing sectors, gaining more than 100% each.

In Japan, utility and financial services sectors excelled, while chemicals, merchandising companies and banks lagged.

Hong Kong's real estate sector was its top performer, accounting for 2.5 percentage points of the index gain. Conversely, the banks reduced the gain by 1.75 points.

In Spain, the banking sector performed strongly, accounting for nearly nine percentage points of the index gain.

The EAFE's return for the three months was 15.6% in dollar terms.

Local currency bond market returns generally were unexciting, with the Belgian market performing best, at 4.4%. Weakest performances included the United Kingdom, −6.8%, and Australia, −6%.

On a currency-adjusted basis, the Continent and the Japanese market gave the best bond market

Corporate Finance

Credit downgrades are on the upswing

By Brad Rudin

More corporations suffered credit downgrades at the hands of Moody's Investors Service during the first three quarters of this year than during all of 1985, a development rating agency officials blamed on takeovers and troubles in basic industries.

Standard & Poor's Corp., New York, downgraded 264 corporations for the first three quarters of 1986 compared with 272 for all of last year.

Wall Street analysts, saying the two New York agencies were preoccupied with leverage, took exception to the wave of lowered ratings.

"A more rigorous analysis should reveal that certain companies will be big winners using leverage and certain companies won't," said Mariel Clemensen, manager of the taxable fixed-income research group at Donaldson, Lufkin & Jenrette Inc.

"To paint them all with the same brush, downgrade them all and trade them all like double Bs, provides a wonderful opportunity for those of us are willing to look at the situation much more rigorously," she said.

William J. Honan, a corporate bond strategist at Prudential-Bache Securities Inc., also wondered whether the rating agencies are overreacting to leverage. "At times, yes, they do shoot from the hip. I don't think at times they basically look at earnings, the power of the entity to pay down quickly the debt load."

Moody's downgraded 191 corporations and Standard & Poor's, 236, during the first three quarters of 1986. Downgrades accounted for 60% of Moody's rating changes and 70% of Standard & Poor's.

First-quarter rating changes by Moody's downgraded $63.3 billion in debt, but the volume fell to $33.5 billion in the second quarter. Third-quarter changes by Moody's lowered ratings for $35 billion, for $132 billion total in the first three quarters. Standard & Poor's downgrades totaled $128 billion for the first three quarters; $22 billion in the first quarter, $58 billion in the second; $48 billion in the third.

At Duff & Phelps Inc., Chicago, the 71 downgrades for the first three quarters accounted for 61% of the total changes made by the agency.

Fitch Investors Service, New York, lowered the same number of corporate debt ratings as it boosted, 44. Data about Fitch comes from *Pensions & Investment Age*'s taily of rating actions listed in the agency's monthly registers. The other agencies supplied their statistics.

The deterioration in credit ratings continues a trend that began after World War II and accelerated at the start of the 1980s. For example, downgrades accounted for 79% of Standard & Poor's industrial sector rating actions in 1985, compared with 59% in 1981.

Rating agency analysts

Continued on page 46

The latest financing twist

Issuers, investors interested in CMOs with floaters

By Marci Baker

A new avenue for mortgage-backed financing is emerging as an increasing number of Wall Street firms and issuers have launched collateralized mortgage obligations with floating-rate tranches.

Since Shearson Lehman Brothers debuted the instrument a month ago in a $150 million CMO, the volume of CMO deals with floaters has climbed to almost $2.5 billion. Just more than $1 billion of those securities represent variable-rate tranches.

Overall, the issues were met with steady interest from investors, with the shorter-term floating-rate tranches bought by new players in the CMO market.

"Clearly the product has been well received from both issuers and investors," said Mark Burton, a vice president at Shearson Lehman, which is offering its CMO floaters under the trademarked name FIRSTS — floating interest rate short tranche securities.

Shearson followed up its first deal with a $120 million CMO with floaters for Centex Acceptance Corp., Dallas, and more recently with a $107.6 million deal for Guaranteed Mortgage Corp., Detroit, and a $183 million offering by Ryland Acceptance Corp., Columbia, Md.

First Boston Corp., Salomon Brothers Inc. and Merrill Lynch Capital Markets have followed Shearson into the market with their own deals.

The emergence of the new security and a tightening of spreads are responsible for much of the surge in CMO volume in past weeks.

CMO volume totaled $3.8 billion for the first half of October, according to IDD Information Services. Almost one-third of that represented deals with variable-rate tranches.

Although Wall Street firms are introducing their own nuances to the security, the general structure of the new CMOs are similar:

The deals are structured in three- or four-tranche CMOs, with the interest rate on the initial short-term tranche pegged to the London interbank offered rate and capped at specified levels.

The expected average lives of the short-term, floating-rate tranches ranged from 1½ to almost five years.

For the issuer, the new financing vehicle provides cheaper financing in that the initial floating-rate tranche carries rates substantially lower than they would if those tranches were fixed.

Also, the floating-rate tranche, because it moves in tandem with interest rates, acts as a hedge against the behavior of residuals for traditional fixed-rate vehicles.

This was one key motivation behind Centex Acceptance's $120 million CMO offering in September.

The deal included $37 million of CMO floaters as the first of the four-class offering. Underwritten by Shearson Lehman, the securities have an expected average life of 2.8 years and will pay interest quarterly at just more than 31 basis points over LIBOR.

Although Centex will keep the leftover cash flows created from the payment stream of the underlying Government National Mortgage Association collateral, the company doesn't consider itself in the business of investing. "What we do is build homes. So reducing the volatility of the residuals was a large benefit to us," said Steven Craig, vice president of Centex.

The issuer shaved more than 100 basis points off the cost of financing by tapping the floating- rather than fixed-rate structure in the first tranche of the deal.

Floating-rate CMOs promise to broaden the list of investors who buy mortgage-backed securities.

The recent offerings generated interest from short-term trust funds, which typically have not bought CMO paper, said Jeffrey Kronthal, a managing director at Salomon Brothers, which sold $164.5 million of floating-rate securities in a $500 million four-tranche CMO in late September.

Also buying the floaters were some overseas investors and some banks. Thriftsso far have shown limited interest.

Sales of the floating-rate securities have been buoyed by intense demand recently for short-term paper, said Mr. Kronthal.

Indeed, the demand was also evident with Detroit-based General Motors Acceptance Corp.'s mammoth offering of short-term securities backed by automobile receivables, one First Boston banker noted. The deal at its originally scheduled $3.2 billion was the second largest public sale of securities. It was ultimately increased to $4 billion to meet demand.

Wall Street has been focusing more attention on the equity in creating new wrinkles in mortgage securities, a development that some say has come as a result of the poor performance that CMO residuals suffered at the hands of the bond rally earlier this year.

For traditional fixed-rate CMOs, the equity offers strong

Continued on page 49

New issues of corporate securities

Sept. 29 — Oct. 10, 1986

Issue date	Company	Amount ($ mil.)	Type of security	Offering price Debt (%) Share ($)	Gross spread as % offer price	Where traded (to list)	Managers
Debt							
9/30	Colt Industries	550.00	Sr. Sub. Deb.	99.50%	3.015	NY	Morgan Stanley/Drexel Burnham Lambert
10/3	ML Trust II	500.00	FNMA CMO	100.00%	.500	OTC	Merrill Lynch
10/7	El Paso Funding Corp.	311.30	Lease Bond	100.00%	.875	OTC	PaineWebber/Smith Barney, Harris Upham/Drexel Burnham Lambert
10/7	International Bank for Reconstruction	300.00	Bonds	100.00%	.875	NY	First Boston/Goldman, Sachs/Merrill Lynch/Salomon/Morgan Stanley
10/10	U S WEST Capital Funding	275.00	Gtd. Notes	99.00%	.657	LUX	Salomon/Goldman, Sachs/Merrill Lynch/Shearson Lehman
10/6	CMO Trust 10	272.90	FNMA CMO	99.88%	.501	OTC	Salomon
10/7	Shell Oil Co.	250.00	Notes	99.75%	.627	OTC	First Boston/Salomon
10/1	The Bank of New York Co.	225.00	Notes	100.00%	.250	OTC	Goldman, Sachs
10/3	Santa Barbara Funding I	219.83	FNMA CMO	99.91%	.576	OTC	First Boston
10/2	New World Pictures	215.00	Sub. S.F. Deb.	97.00%	2.191	OTC	L.F. Rothschild, Unterberg, Towbin
Common Stock							
10/9	UAL Inc.	232.00		$58.00	2.24	NY/MW/PC	Morgan Stanley/Merrill Lynch
10/10	Hotel Investors Trust	66.70		$21.50	6.00	NY	Merrill Lynch/Shearson Lehman/Alex. Brown
10/9	Perkins Family Restaurants	65.60		$13.00	7.00	IPO (NY)	Drexel Burnham Lambert/Dain Bosworth/Moseley/Sutro & Co.
10/3	Airlease Ltd.	61.50		$20.50	7.17	IPO (NY)	Dean Witter Reynolds/Smith Barney, Harris Upham/Tucker, Anthony
10/2	King World Productions	46.40		$14.00	4.29	NY	PaineWebber
10/3	Fieldcrest Cannon	44.50		$31.75	3.46	NY	Kidder Peabody
10/2	Armor All Products Corp.	43.80		$12.50	6.56	IPO	Morgan Stanley
10/3	Land's End	42.00		$30.00	6.00	IPO	Kidder Peabody
10/2	Heritage-NIS Bank for Savings	39.00		$9.00	6.44	IPO	PaineWebber/Merrill Lynch
10/8	James Madison	27.50		$11.00	6.82	IPO (AM)	Dean Witter Reynolds
10/2	Charming Shoppes	27.50		$27.50	3.49	OTC	Shearson Lehman/Alex. Brown/Montgomery Securities

Source: Securities Data Co., New York

Sr. sub. deb: Senior subordinated debentures
FNMA CMO: FNMA-backed collateralized mortgage obligation
Gtd. notes: Guaranteed notes
Sub. s.f. deb.: Subordinated sinking fund debentures

NY: New York Stock Exchange
OTC: Over the Counter
IPO: Initial Public Offering
AM: American Stock Exchange
LUX: Luxembourg Stock Exchange
MW: Midwest Stock Exchange
PC: Pacific Stock Exchange

Downgrades . . .

Continued from page 45

offered gloomy predictions about the future quality of corporate debt.

"Overall, it is Moody's view that credit rating downgrades on corporations and financial institutions will continue to outnumber upgrades for the next two years — although utility ratings will rise," said Harold H. Goldberg, chairman of Moody's corporate rating committee.

"The negative trend will reflect the impact of international trade imbalances on various domestic manufacturing sectors and difficulties associated with the hard-pressed basic industry sectors," Mr. Goldberg said in a statement announcing the downgrade statistics.

Linking deteriorated credit to corporate takeovers, Mr. Goldberg predicted continued restructurings. Downward movements in stock prices and interest rates, as well as the drive toward diversification, are the forces encouraging mergers and acquisitions, according to the Moody's statement.

Restructurings, which accounted for 16% of the corporate downgrades for the first three quarters of this year, made up 33% of the lowered rating in 1985, Moody's reported. International Paper Co., Colt Industries, Kiewit Continental and Container Corp. of America were cited by Moody's as examples of credit downgrades resulting from corporate restructurings.

The credit outlook would be better were it not for corporate restructurings, said Mr. Honan of Prudential-Bache. "The bottom line to me is that if you measured straight credit, and ignored (leveraged and other buy-outs), you'd have to say the basic credit trend is upward in the aggregate over the last year or so."

Merger and acquisition activity will continue at a quick pace, encouraged by the lure of already established earning streams, said Kathryn Rudie Harrigan, a professor at the Columbia University graduate school of business in New York. "When you are looking for a quick fix, what you do is buy something."

Officials at Duff & Phelps and Standard & Poor's share Mr. Goldberg's concerns about the effects of mergers and acquisitions.

"All these takeovers, tender offers and the battle to prevent them have resulted in the substantial deterioration of credit quality," said William A. Cornish, co-chairman of Duff & Phelps' credit rating committee.

The push by some companies to broaden their earnings stream carries some troubling implications, said Solomon B. Samson, a senior vice president at Standard & Poor's.

"Now that some of these companies are recognizing themselves that they have problems, they are taking steps, which, on the one hand, may be positive in the sense they are considering diversification and getting into other areas," Mr. Samson said. "But it involves an increase in debt until . . . they can successfully bring these operations into the fold."

A Standard & Poor's report published this year offers a skeptical view of those who pay "high premiums in the pursuit of perceived synergies." Experience, the report said, shows "that in most cases, the expected benefits are elusive."

Defensive measures taken in response to a takeover effort also undermine corporate credit quality, the Standard & Poor's report said, noting that recapitalization strategies often rely upon the replacement of equity with debt.

Mr. Samson cited Carl Icahn's bid to acquire USX Corp. as an example of a takeover that would likely result in the deterioration of credit. Either Mr. Icahn will win and the company will be transformed into a more risky enterprise, or "the company will be successful in defending itself and in the process end up being more risky from a bondholder perspective," Mr. Samson said.

Easier access to the capital markets stands as another factor in the deterioration of corporate credit ratings, the Standard & Poor's report said. "Companies are encouraged to be more aggressive, both financially and operationally, by the easy availability of debt capital." ■

Corporate credit rating changes*

	First three quarters - 1986		1985	
	upgrades	downgrades	upgrades	downgrades
Duff & Phelps†	47	72	53	116
Fitch	44	44	40	58
Moody's	126	191	124	153
Standard & Poor's†	113	264	125	272

* Measures changes by company, not by issue.
† Reflects long-term debt only.
Sources: Figures derived from data provided by the agencies.

Equitable Group and Health Insurance Company

a division of

The Equitable Life Assurance Society of the United States

and the

Health Plans Division

of

Hospital Corporation of America

have entered into a joint venture to be called

EQUICOR
Equitable HCA Corporation

The undersigned acted as financial advisor to The Equitable Life Assurance Society of the United States in this transaction.

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October 1986

Pensions & Investment Age's Datebook section includes a listing of upcoming events in corporate finance.

If you are sponsoring a conference or meeting focusing on a corporate finance and wish to have it listed, send the information to Arline Larson, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611; (312) 649-5407.

Bank fees . . .

Continued from page 3

equity accounts.

• Large counselors, those managing more than $3 billion, decreased balanced and equity account fees slightly more than 1%, the first time a manager has decreased its fees since the survey's inception five years ago.

Banks traditionally have charged lower rates than investment counselors to nurture client relationships in other areas, like commercial banking, said Mary Ann Buck, manager search analyst for SEI.

But the fee gaps have been closing in recent years as banks began operating trusts as profit-and-loss centers.

"Banks have also realized that in order to keep good people, they are going to have to pay good salaries," Ms. Buck said. "So they are trying to make their salaries comparable to investment counselors."

Young D. Chin, vice president at Harris Trust and Savings Bank, Chicago, said banks have channeled their investment strategies toward more high-risk ventures, which results in higher fees.

"Banks are increasingly becoming more aggressive and innovative in investment management," he said. "I think the gaps (in fees) will continue to close."

SEI surveyed the fees of four groups of money managers (large and small investment counselors and banks and trust companies), for three types of portfolios (balanced, equity and fixed income) and for four account sizes ($5 million, $10 million, $25 million and $50 million).

The managers base rates on the percentage of assets managed and quote fees in basis points; 100 basis points equals one percentage point.

For example, large banks and trust companies averaged 46 basis points for equity accounts, as opposed to 44 basis points last year, while fees for balanced accounts remained constant.

Small banks and trust companies' balanced and equity fees now average 48 and 49 basis points, respectively, although their fixed-income fees are almost 6% lower than large banks.

Large banks and trust companies charge lower fees because they offer many passive products, whereas small banks and trust companies engage in more active management.

"As a general rule, index-based (passive) products are less expensive," Mr. Chin said. "Small banks offer little or no passive products."

Small investment counselors charge the highest fees of the manager types. Their balanced and equity fees average 67 and 83 basis points, respectively, approximately 45% higher than the fees of large banks and trust companies.

"Smaller counselors are often looking for a limited account load," said Paul Berg, president of Berg Fiduciary Consultants, Port Chester, N.Y. "So they have a pricing strategy where they charge relatively high prices that are not negotiable."

Mr. Berg said many small counselors also are specialty managers that charge a premium for a product that is actively managed with a good deal of expertise.

Price negotiating plays a large role in large counselors' client relationships and is a possible reason for the slight decline in large counselors' fees, Mr. Berg said.

"Large counselors manage a lot of big public pension funds," he said. "Many managers will give 10% to 20% discounts to these customers."

Fees for balanced and equity accounts traditionally have been much higher than fees for fixed-income accounts. That's because fixed-income management historically has been passive and sponsors are unwilling to pay high fees for this type of strategy, Ms. Buck said.

"In the last five years, there has been more active management of these fixed-income accounts," Ms. Buck said, "but sponsors are still hesitant."

Fees for all three types of accounts increased from last year, but balanced and equity fees remained roughly 30% higher than fixed-income fees. •

Enron uses . . .

Continued from page 3

evaluating exactly which types of investments and which managers it will use in the new defined benefit plan."

Delaware Investment Advisors, Philadelphia, an equity manager, and Pacific Investment Management Co., Newport Beach, Calif., a bond manager, will be retained from the InterNorth plan as part of the new Enron stable of managers, he said.

In a prepared statement, Kenneth L. Lay, Enron's chairman and chief executive officer, said the board action setting up the ESOP and the stock purchase from the two corporate raiders "is part of an ongoing asset restructuring program designed to increase shareholder value. The decisions by the board of directors . . . reflect its conclusion that the best interests of the company and its stockholders will be served by the continuation of Enron as an independent company."

That comment drew immediate fire from T. Boone Pickens Jr., chairman of the United Shareholders Association and himself a recognized corporate raider, who said the Enron decision was not in the best interests of shareholders.

In a statement, Mr. Pickens said Enron shareholders received "a $400 million double whammy" as a result of the company's stock buyback. He said the $230 million asset reversion belonged to shareholders. The "greenmail announcement" caused the price of Enron stock to drop to about $40, reducing the company's market value about $180 million, he said.

"Greenmail is a symptom of weak management, and Enron's executives have folded in a big way," Mr. Pickens said.

Not all institutional holders of Enron stock felt the action was detrimental.

Dave Olsan, portfolio manager and analyst at M.D. Sass Investors Services, New York, which holds about 1 million shares of Enron, said the stock "is still a very good one to hold or to buy."

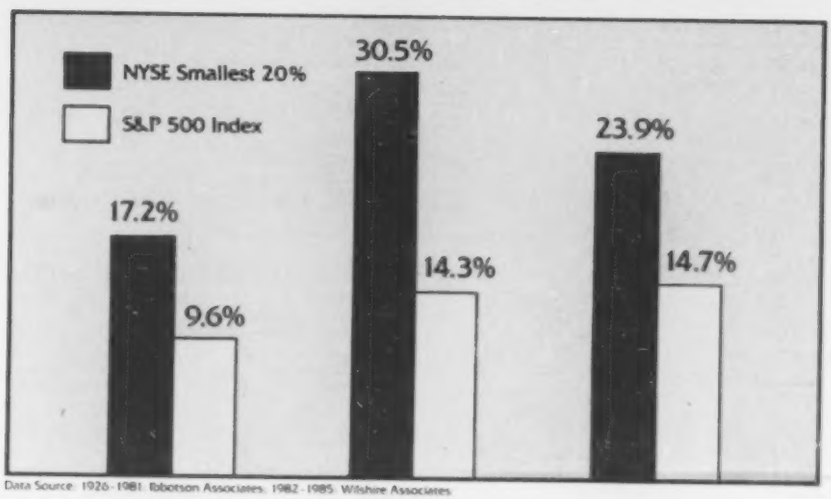
He said the tax savings to the company through establishing the ESOP and using dividends from the stock to repay the $105 million loan would help the company's cash flow.

"This whole transaction doesn't change anything for us; it may lift shareholder values by 50 cents to $1 because of the tax considerations of the transaction," said Mr. Olsan.

He said the Enron balance sheet already was highly leveraged and "I sort of wonder what (Mr.) Jacobs and Leucadia hoped to accomplish, anyway.

"Yes it is greenmail. I'm not really teed off about it, but I'm sorry that they had to pay it. I've seen these raiders operate before and what they really want is to bully the management and get in their hair and try to mess them

Check this Record!



Annualized Returns for Periods Ending 12/31/85

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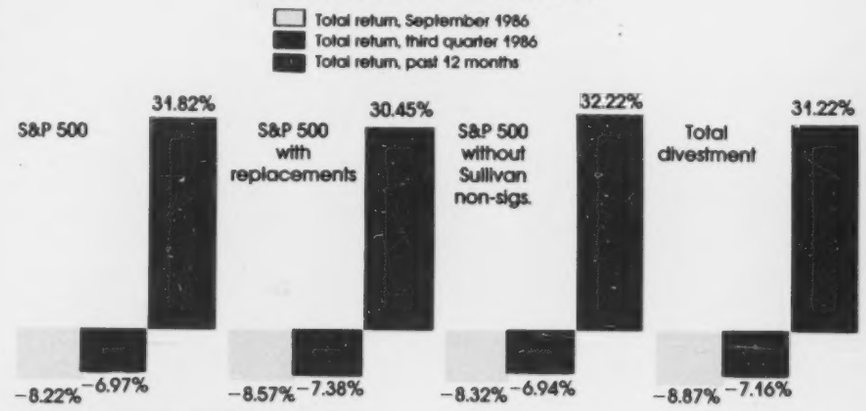
Statistically speaking

The Statistically Speaking page offers an at-a-glance look at statistics for the latest quarter.

The Wilshire South Africa Free Index, Mercer-Meidinger bullet GIC data, First Chicago's MMI and the Russell 3000 returns will appear regularly.

Other data will be used as time and space allow.

South Africa Free Index



Source: Wilshire Associates, Santa Monica, Calif.

S&P 500 with replacements: replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories**: excludes 20 companies, no replacements. **Total divestment**: eliminates all companies with South Africa involvement, no replacements.

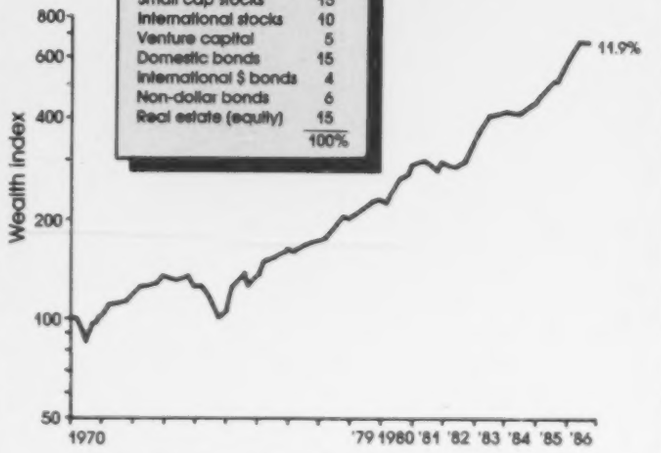
Multiple Markets Index

1970 through 1979 data reflect year-end figure

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

	Weights
Large cap stocks	30%
Small cap stocks	15
International stocks	10
Venture capital	5
Domestic bonds	15
International $ bonds	4
Non-dollar bonds	6
Real estate (equity)	15
	100%

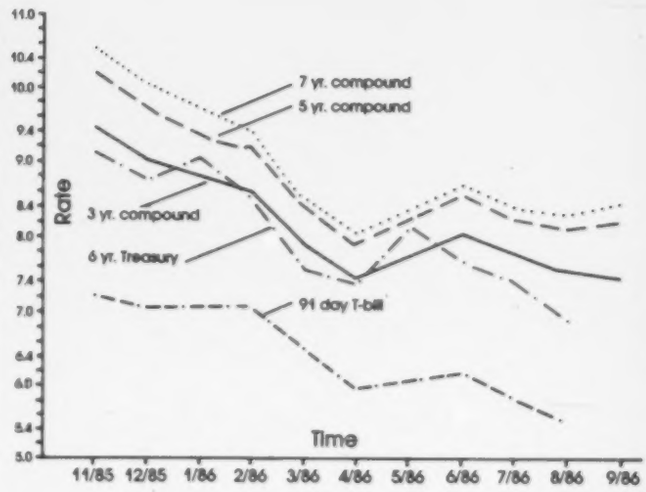
Five-year annualized return	19.2%
One-year return	28.8%
Lastest quarter	-1.3%



12/31/69 = 100 Data through 9/30/86

Source: First Chicago Investment Advisors, Chicago

William M. Mercer-Meidinger Inc. Summary of average bullet GIC data vs. market yields



Source: William M. Mercer-Meidinger Inc., Louisville, Ky.

Third quarter 1986 returns

	Russell 3000	Russell 1000	Russell 1000 by market capitalization				Russell 2000
			Large	Medium/large	Medium	Medium/small	
Financial services	-9.6%	-9.6%	-9.3%	-7.7%	-10.6%	-10.6%	-9.2%
Utilities	-0.6	-0.6	-5.3	3.6	2.9	1.1	-0.1
Technology	-8.5	-7.2	-6.3	-8.3	-8.0	-8.3	-16.8
Producer durables	-9.2	-9.0	-14.9	-8.4	-7.5	-6.8	-10.8
Materials and processing	-4.0	-3.5	-4.0	-5.9	0.3	-5.5	-7.2
Integrated oils	12.6	12.7	13.0	11.4	12.5	5.2	-11.8
Other energy	-0.6	0.5	—	4.2	-0.8	-2.0	-9.4
Consumer staples	-13.1	-13.1	-13.5	-12.7	-16.5	-6.5	-13.7
Consumer discretionary	-14.9	-14.9	-14.8	-17.5	-12.7	-13.2	-14.8
Health care	-14.9	-14.7	-15.6	-11.9	-11.2	-20.8	-16.4
Auto and transportation	-6.5	-6.0	-8.0	-4.9	-8.8	-0.4	-11.4
Total	-7.7	-7.2	-6.9	-7.9	-6.6	-7.9	-12.3

Source: Frank Russell Co., Tacoma, Wash.